

Record

CH

Ironie Cough & Mixture

R Syrup of Scilla
 Tricet Opia Cough. aa ʒi
 Vin: Antimonii ʒi
 Ext Glycyrrhiza F.E.
 Balsam Copaiba aa ʒij
 M. Sig Dose, a teaspoonful
 every two, three or four hours
 as case requires.
 E. E. Williams, M.D.

CH
 L

56

Williams

Letter Record.

Concerning

The Migration of Birds.

By Edgar A. Mearns,
Member of the Committee
on Migration of Birds,
Appointed by the American
Ornithologists' Union, and
Superintendent of the Rocky
Mountain District (Idaho,
Montana, Wyoming, Utah,
Colorado, Arizona, New
Mexico).

1. Mr. A. W. Anthony
Denver, Colorado
Febr. 7, 1884.
2. Capt. P. M. Thorne
Capt. 22nd Infantry, U.S.A.
Fort Lyon, Colorado.
Febr. 25, 1884.
3. Mr. A. W. Anthony.
Beaverton, Oregon.
Febr. 27, 1884.
4. Mr. H. J. Smith.
Cor. Hoyt + Delana Sts.,
Denver, Colorado.
Febr. 27, 1884.
5. Dr. A. K. Fisher.
Sing Sing, New York.
Febr. 27, 1884.
6. Dr. Walter W. R. Fisher
Fort Apache, Arizona
Jan. 12, 1885
Wrote letter & mailed 1885
Blank and circular.

Indians of Arizona

35-000

Apache Lonto

White Mtn or Warm Spring
Navajo

Mogon

~~Mojave~~ ~~Muaripai~~

Mojave

Yumas

Chimahuavi

Cocopah

Cecol

Isds. of Gulf Co. (Pru-
-cipally Shark Is., North Cal.
They are can.

Gomg East

Opata (Mex in Sonora)

Papagoes

Pimas

Manicopa

Timajo

Mts Ext N. E. Ariz.

Pintes Ext. N. W. "

Shwasupais

Copied in Journal Vol. IV, p. 115

7. Dr. Wm E. Hepkins

Fort Lowell, Arizona

Sent one 1885 Circular and
blank on Jan. 12th, 1885

8. J. Willard Shultz

Fort Conrad, via Fort Benton,
Montana Terr. Wrote letter and

Sent 1 blank & 1885 circ. Jan. 12

9. Capt. P. M. Thorne, 22nd Inf. Ar.
Fort Lyon, Colorado.Sent 4 blanks & 1885 circular on
Jan. 12th, 1885 with letter

10. Mr. A. L. Evenson

Laramie, Col. Wrote a
letter and sent 1 blank & cir. 1885.

Oct. 26th

Left Fossil Creek at six o'clock P.M., and reached Fort Verde at 4 P.M.

1. Oroscoptes montanus. - Common all along.
2. Harpodynchus crissalis. - On the Verde River.
3. Sialia mexicana. - Common.
4. Sialia arctica. - One small flock, near the E. of Fossil Creek Canon. The first I have seen this autumn.
5. Lophophanes inornatus. - Common in cedars & junipers.
6. Catherpes mexicanus conspersus. - Common in Fossil Creek Canon where both last evening and this morning they made a surprisingly loud noise.
7. Salpinctes obsoletus. - Common.
8. Eremophila alpestris. - Large flocks in the Verde Valley.
9. Dendroica auduboni.
10. Myiadestes townsendi. - Quite plentiful among the cedars on the hills & in the canons all along. Singing loudly & sweetly.
11. Chondestes nivalis. - One at

Oct. 26.

the battery at Fort Verde.

12. Regulus calendula.
13. Carpodacus frontalis. - In the Verde bottom.
14. Spizella socialis arizonae.
15. Zonotrichia leucophrys.
16. Junco hiemalis oregonus.
17. Pipilo aberti. - In the Verde bottom.
18. Pipilo fuscus susquehannae. - One or two.
19. Proocetes gramineus caninus.
20. Calamospiza bicolor.
21. Sceloporphagus cyanocephalus.
22. Sturnella neglecta.
23. Corvus frugivorus. - One large flock and several scattered individuals.
24. Corvus corax. - One or two pairs.
25. Agelaius phoeniceus woodhousei. - In cedars near "the Sam-log."
26. Spizella cyanocephala. - Flocks.
27. Sayornis sayi. - At Fort Verde.
28. Empidonax hammondi. - On Fossil Creek, Near Creek, and the Verde River.
29. Ammodramus flaviventris. - A few.

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30. Accipiter luscus.
 31. Accipiter cooperii.
 32. Buteo borealis calurus.
 33. Scops asio - Serecoling all night + early in the morning on Fossil Creek.
 34. Pseudoeucoptes - 6 seen on Fossil Crk.
 35. Lophortyx gambeli.
 36. Zenaidura macroura - On Clear Creek.
 37. Ardea herodias - Verde River.

Mammals: -

1. Canon Squirrel. - Several seen on Fossil Creek and near the Saw-log.
 2. Lepus callotis texianus
 3. Lepus sylvaticus montali.
 4. White Deer - Genl. Cook saw a number + killed one barren doe.

Oct. 26.

- 3467 Melanerpes formicivorus. ♂ ad.
 222; 350; 112; 106; cul, 13;
 nost, 188; gape, 21; tarsus, 23.5
 mte., 22.5; cl., 6.5. Bill, black.
 Tarsi, feet + claws, black, slightly
 tinged with brown. Irides, hazel.
 Seen on Fossil Cr. + Ft. Verde.
 3468. Oroscoptes montanus. ♀ ad.
 222; 314; 96; 99; nost, 13;
 gape, 26; tarsus, 32; mte., 24.5
 cl., 7. Seen on Fossil Cr. + Ft. Verde.
 3469. Oroscoptes montanus. ♂ ad.
 233; 326; 101; 102; nost, 13;
 gape, 26; tars., 32; mte., 25;
 cl., 7. Saw Log, between Fossil
 Creek + Fort Verde, Ariz.

Not labelled.

Oct. 27.

To-day Gent. Creek and I went back to Whipple; and I went twenty miles back on yesterday's trail after the deer Gent. Creek shot yesterday. On the ride, which kept me till late at night the following birds and mammals were seen:

1. Harporthynchus crissalis. 1 seen Valley near the fort.
2. Oreoscoptes montanus.
3. Sialia mexicana. Common.
4. Sialia arctica. - Common.
5. Lophophanes inornatus.
6. Salpinctes obsoletus.
7. Myiadestes townsendi. Quite a number seen.
8. Eremophila alpestris. - Large flocks.
9. Dendroica auduboni.
10. Carpodacus frontalis.
11. Amphispiza bilineata.
12. Loxia leucoptera.
13. Sturnella socialis arizonae.

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14. Pipilo aberti. - On the Verde river.
15. Junco hiemalis oregonus. - Common.
16. Scolecophagus cyanocephalus.
One at Fort Verde has its back and neck spotted with white.
17. Sturnella neglecta.
18. Corvus corax.
19. Gymnophila cyanocephala. -
Several immense flocks. One contained from 500 to 1000 birds. They were in the cedars at the Saw-Log. They probably feed on the berries.
20. Apelococcyx woodhousei.
21. Tayonius sayi.
22. Quercus borealis calurus.
23. Scops asio. - heard as we rode home at night.
24. Lophodytes gambeli. - A few.

Mammals: -

1. Canis callotis texianus
2. Canis latrans nuttalli

Oct. 27.

3. Prairie Wolf. - Common in this region. Howled all night.
4. Striped Spermophile. - One in the mesquites on Clear Creek.
5. Canon Squirrel. - A number were seen on this trip.
6. ?? Prairie Dog. - A low animal was seen running at a distance which I suspected was a prairie dog, although it may have been an Arctomys as it was a good way off.

Oct. 28.

- (Sanitary Valley, Sonora)
 3467. Peromyscus maniculatus ^{ad.}
 245; 472; 151; 97; cul., 29;
 gape, 21; tarsus, 24; mte., 27;
 cl., 9. Irides, white
- ~~3468. Peromyscus maniculatus
 juv. 230; 438;~~
3469. Peromyscus maniculatus ^{ad.}
 238; 460; 142; 91; cul., 25;
 gape, 28.5; tars., 24; mte., 26;
 claw, 9.
3470. Peromyscus maniculatus ^{ad.}
 232; 557; 109; 150; cul., 30;
 gape, 27; tars., 28; mte., 31;
 cl., 10.5.
3471. Peromyscus maniculatus ^{ad.}
 288; 535; 162; 107; cul., 32;
 gape, 36; tars., 28; mte., 30;
 cl., 10.

not labelled

Not labelled. Not labelled.

1. Ft. Verde to Clear Creek. 6 miles.
2. to Mud Tanks
3. to Baker's Butte
4. to General Springs.
5. to the Lake Tanks.
6. to Tanks near head of Cañon Cr.
7. to ~~between~~ between Cañon Cr. & Cibicu Cr.
8. to Cibicu Cr.
9. to Carrizo Cr.
10. to Forestdale.
11. to Holbrook Road, 4 miles fr. Apache.
12. to Fort Apache.
13. Remained in camp at Apache
14. to Black River 2 miles above crossing
15. to Camp on Ash Creek
16. to one mile above Gila crossing at Sub-Agency
17. to San Carlos Agency.
18. Remained in camp at San Carlos
19. to Coyote Springs.
20. to Wheatfield
21. to Salt River.
22. to Camp on Gila Cr.
23. to Camp on Salt River.

Oct.

24th to the Natural Bridge on Pine Creek.

25th to Fossil Creek at the Springs at }
foot of Hardscrabble Hill }

26th to Fort Verde.

27th to the place where Genl. Crook
shot a Deer, 3 miles south of the
Saw-Log & back to Fort Verde
The other members of the party
returned to Whipple Barracks.

I spent the greater part of the
day in looking for birds
on the San Carlos River. I
walked from the junction of
the San Carlos with the Gila
up the river several miles. The
following birds were seen:

1. Wrens. - These Wrens have
a note like the Ruby-crowned
Kinglet. They inhabit the thickets
along the River.
2. Salpinctes obsoletus. - Common
along the San Carlos.
3. Dendroica auduboni, Common.
4. Geothlypis trichas. - Several.
5. Lanius ludovicianus excubitorides. - Singing.
6. Carpodacus frontalis. - Common.
7. Astragalinus pictus.
8. Melospiza fasciata. - Abundant.
9. Spizella socialis arizonae.
10. Zonotrichia leucophrys. - Exceed-
ingly plentiful. Singing.

(Oct. 18th.)

11. Amphispiza bilineata. - A few in the mesquite thickets.
 12. Calamospiza bicolor. - One only.
 13. Cardinalis virginianus. Four seen. Call-note exactly like the Eastern species.
 14. Pipilo aberti. - Abundant.
 15. Scelopophagus cyanocephalus. - In immense flocks about San Carlos.
 16. Xanthocephalus heterocephalus do.
 17. Corvus corax. - Abundant. Its note differs from the note of the Ravens hitherto seen. It is probably var. cryptoleucus.
 18. Tyrannus vociferans. - A few.
 19. Sayornis sayi. - About San Carlos.
 20. Ceryle alcyon. - Common.
 21. Centurus uropygialis. Common. They are often found in the boughwood along with Picus scalaris.
 22. Picus scalaris. - Abundant.
 23. Sphyrapicus varius nuchalis.
 24. Colaptes auratus.

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Abundant.

25. Linumunculus sparverus.
 26. Accipiter cooperi.
 27. Circus hudsonius. Common.
 28. Lophortyx gambeli. One fly.
 29. Ardea herodias. - Several.
 30. Butorides virescens.
 31. Sturnella neglecta. - A few.
 32. Vermivora. Flycatcher. - One, no name.
 34. Thryothorus. - 7 ad.
 135; 182; 55; 58; nost., 11; gape, 18.5; tarsus, 18.5 (also); mte., 16.5; cl., 5. Irides, hazel. Bill, with mandible, flesh-color, shading near tip to dusky plum-brown; maxilla, blackish. Tarsi, feet & claws, brownish-black.
 34. 28. Cardinalis virginianus 8 ad.
 238; 309; 96; 124; cul., 19; gape, 19; depth of bill at base, 18; width of bill at base, 14.5; tars., 24; mte., 23.5; cl., 8. Irides, hazel. Bill reddish, with brown discolorations.

south of San Carlos
 P. R. of Arizona

Oct. 18.

- 2 Tarsi, feet & claws, pale plumbeous-brown.
 3429. Centurus uropygialis. ♂ ad.
 264; 450; 138; 98; cul, 30.5;
 gape, 35; tarsus, 24; mtc., 30;
 cl., 11.
 3430. Centurus uropygialis ♀ ad.
 239; 415; 129; 94; cul., 28;
 gape, 33; tarsus, 22.5; mtc., 27;
 cl., 10.5.
 3431. Centurus uropygialis. ♀ ad.
 248; 439; 133; 96; cul., 29;
 gape, 33; tarsus, 24; mtc., 27.5;
 claw, 10.5.
 3432. Pipilo aberti ♀ ad.
 231; 284; 86; 118; cul, 16;
 gape, 16; tars., 30; mtc., 27;
 cl., 9.
 3433. Geothlypis trichas. ♂ juv.
 140; 188; 58; 57; most l., 9;
 gape, 15; tars., 22.5; mtc., 18;
 cl., 5.
 3434. Butorides virescens ♂ juv.
 Length to end of claws, 630;

Oct. 18.

- 505; 780; 210; 70; cul,
 60; gape, 80; tibia, 23; tars., 56;
 mtc., 59; cl., 10.
 3435. Circus hudsonius ♂ juv.
 465; 1070; 353; 230;
 cul. & cere, 29; cere, 12; cul., 18;
 gape, 35; tars., 75; mtc., 45;
 cl., 15.

October - 19th.

We left San Carlos at 6 a.m.
 and camped 14 miles
 on the trail to Globe, at Coyote
 Springs. The trail was all
 up hill & a good way through
 a big cañon with perpendicular
 red clay walls. The south
 side of the hills were studded
 with the Giant Cactus. One
 of them I saw a bird perched
 that so far as I could see.
 Mazanitos were abundant

2. Some 1 A. I. of m. a few
cedars in the ... of
... bushes, and
a ...
shrubs ...
untill ...
high w/ ...
a few ...

Scrub oaks were found.

1. Oroscoptes montanus
2. Sialia obsoletus. Abundant; singing
3. Phainopepla nitens. - Several.
Its note is like - Cow call
The Robin
4. Parus ludovicianus excubitorides
5. Podiceps ...
6. Zonotrichia albicollis
Singing delightfully
7. Spizella socialis arizonae.
8. Calamospiza bicolor. - Several
looks near the Gila.
9. Pipilo maculatus megalonyx
10. Pipilo aberti. - In the Gila bottom

11. Amphispiza bilineata } Gila bottom
12. Melospiza fasciata }
13. Scolecophagus cyanocephalus.
14. Xanthocephalus heterocephalus
15. Sturnella neglecta.
16. Corvus corax
17. Aphelocoma woodhousei
18. Accipiter cooperi.
19. Bubo virginianus
20. Gophortyx gambeli (See over page)

The General saw two Mule
Deer. Coyote Spring

3436. Limnocolus flavescens
L. juv. 277; 605; 187; 136;
cul. + cere, 14; cere, 4; cul., 11;
gape, 19; tars., 37; mte 33; cl. 12.5.
3437. Phainopepla nitens ♂ ad.
200; 292; 90; 99; cul., 11.5;
nostril, 8; gape, 16; tars., 20;
mte 19; claw, 6. Irides, red
Coyote Spring

(Oct. 19.)

3438. *Salinotus absolutus*, ♀ ad.
 150; 225; 68; 55; nost., 14;
 gape, 22.5; tars., 20; mte.,
 18; cl., 4.5. Near Coyote Spring.
 3439. *Calamospiza bicolor* ♂ ad.
 185; 297; 91; 78; cul., 15;
 gape, 15; tars., 25; mte., 24;
 cl., 6.5. San Carlos.
 3440. *Calamospiza bicolor* ♂ ad.
 187; 297; 90; 78; cul., 15.5;
 gape, 15.5; tars., 28; mte., 25;
 cl., 7. San Carlos.
 3441. *Calamospiza bicolor* ♂ ad.
 188; 300; 93; 80; cul., 14.5;
 gape, 15; tars., 25; mte., 24;
 cl., 6.5. San Carlos.
 21. *Pipilo chlorurus*. - Several.
 22. *Colaptes auratus mexicanus*
 24. ^{???} *Dolichonyx orizivorus*. The
 Genl. saw a flock of "Red
 Birds - Bobolinks"!!
 25. *Junco hiemalis oregonus*.
 26. *Pipilo maculatus megalonyx*

(Oct. 20)

We left Coyote Springs at
 5.45 AM. and reached the
 city of Globe at 10.30 A.M.,
 and encamped on the stream
 running through Globe at
 a place called the ^{or Signal Creek} Wheatfield.
 The distance travelled, being
 miles. The ~~road~~ ^{trail} to
 Globe was through mesquites &
Acacia ^{rochetillas} + ^{hackberries} Sugar Berries. The
 Giant Cactus was plentiful
~~in some~~ all the south sides
 of hills after we left Globe.
 Near Coyote Springs we passed
 some rocky mounds of coarse gran-
 -ite exactly like the Point of Rocks,
 & after we reached Globe found a
 great deal of the same rock.
 One whole mountain was piled
 with huge granite boulders, shaded
 with Giant Cacti & some of the
 cacti grew right out of the
 rocks. There were ^{one-hundred} cacti,
 yuccas, & after leaving Coyote the
 stream was lined with cottonwood.

Oct. 20.

1. Merula migratoria propinqua
2. Harporhynchus crissalis
3. Oroscoptes montanus
4. Phainopepla nitens. - Quite a number noted along the route. They skulked in bushes & uttered a shorter, lower & more explosive note than the call-note of the Robin, otherwise like it.
5. Salpinctes obsoletus. - Abundant.
6. Lanius ludovicianus excubitorides. - One seen.
7. Carpodacus frontalis. - Full of song & abundant.
8. Pooecetes gramineus. - A few.
9. Spizella socialis arizonae
10. Zonotrichia leucophrys
11. Junco hiemalis oregonus.
12. Amphispiza bilineata. A few.
13. Cardinalis virginianus. I saw one pair & General Crook saw one female. All

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14. Pipilo fuscus mesoleucus. - ^{in the mesquites.} Abundant; pugnacious; its cries are a little less harsh than Aphelocoma woodhousei & not unlike them in loudness.
15. Pipilo aberti. One or two seen.
16. Pipilo chlorurus. - Common.
17. ??? Dolichonyx oryzivorus. - I saw a flock, which may have been Bobolinks, flying over.
18. Sturnella neglecta. Abundant.
19. Corvus corax. - Rather common.
20. Aphelocoma woodhousei. Common.
21. Cyanocitta stelleri macrolopha. One pair near Globe, this side.
22. Sayornis sayi. - One pair in Globe about a dwelling & one or two seen this side.
23. Tyrannus vociferans. - A few scattered along.
24. Picus scalaris. - Several seen in mesquites & cottonwood.

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25. Centurus uropygialis. Common in the Cottonwoods & Mesquites all the way from Globe to this camp. Usually found in twos. Three shot were all males.
26. Ascendimus torquatus. Abundant in the dead tops of Cottonwoods near this camp.
27. Colaptes auratus mexicanus. Very common.
28. Bubo virginianus. - One flew past camp just at daybreak.
29. Thamnolais spawerius
30. Accipiter jessons. - Several.
31. Buteo borealis calurus. A number of pairs seen. I shot one on a telegraph pole & one on a cottonwood.
32. Lophortyx gambeli. - Extremely plentiful all along.

Oct. 20

33. Zenaidura carolinensis. - Three were seen near Globe (other side) and large flocks & scattered ones this side. The first flocks seen on the trip. I shot three at one shot.
34. Circus hudsonius. - One. Leucotis. - One seen near Globe.
2. Lepus callosus texianus. Several
3. Lepus sylvaticus nuttalli. - A number seen & one shot. They had short ears, barely tipped with black.
4. Canon Squirrel. - One or two.

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3442. *Cardinalis virginianus* ♂ ad.
245; 317; 102; 132; cul., 19.5;
gape, 20; depth of bill at base, 17;
width at base, 14.5; tars., 28;
mte., 26; cl., 8.5. Irides hazel.
Bill, pale red. Tars., feet &
claws, brown. Globe City
3443. *Agynodesmus torquatus* ♂ ad.
286; 555; 173; 114; cul., 30;
gape, 33.5; tars., 26; mte., 31;
cl., 11. Wheatfield on Pinal Cr.
3444. *Agynodesmus torquatus* ♂ juv.
272; 525; 160; 102; cul., 29;
gape, 33.5; tars., 26; mte., 30;
cl., 11. Wheatfield on Pinal Cr.
3445. *Centurus uropygialis* ♂ ad.
250; 430; 129; 93; cul., 29;
gape, 33.5; tars., 24.5; mte., 29;
cl., 10.5. Globe City
3446. *Centurus uropygialis* ♂ ad.
262; 448; 138; 99; cul., 32;
gape, 37; tars., 24.5; mte., 29;
cl., 11. Wheatfield on Pinal Cr.

3447. *Centurus uropygialis* ♂ ad.
249; 438; 132; 100;
cul., 29.5; gape, 34; tars.,
24; mte., 29; cl., 11.
3448. *Pipilo fuscus mesoleucus*
juv. Quite young. Not skinned.
3449. *Accipiter fuscus* ♀ juv.
355; 675; 207; 179;
cul. + cere., 20; cere., 9; cul., 13.5;
gape, 19; tars., 57; mte., 45;
cl., 10. Globe City on crop.
3450. *Pipilo chlorurus* ad.
188; 263; 85; 99; cul., 13;
gape, 14; tars., 27; mte., 23; cl.
7.5. Not skinned.

(Oct. 21.)

1. Merula migratoria propinqua
2. Oroscoptes montanus
3. Mimus polyglottus. - Two seen together. The first on the trap -
4. Regulus calendula. - A few.
5. Salpinctes obsoletus. - Abundant.
6. White-throated Wren. - Singing.
7. Camptocephalus crucephalus. - Quite a number seen among the giant cacti. Their presence was first announced to be by a series of stirring notes uttered in ire as a pair caught me in the act of chopping down the Giant Cactus. After a terrible clink I shot one of them & afterwards secured a pair of them, ~~and~~ that were climbing about some Spanish bayonets.
8. White-browed Wren. - A number seen. Their note is Wren-like, & they also have a harsh cry.

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9. Poliophtila coerulescens.
10. Dendroica auduboni.
11. Phainopepla nitens. - Several. Call-note heard only.
12. Carpodacus frontalis.
13. Poocetes gramineus.
14. Amphispiza bilineata. - Abundant.
15. Zonotrichia leucophrys. - Singing.
16. Junco hiemalis oregonus.
17. Spizella socialis arizonae.
18. Peucaea boucardi. - Quite a number seen in the scrub oaks.
19. Pipilo fuscus maculatus. Its note is squeaky and harsh often uttered - on the bird sits on a granite boulder amongst the scrub.
20. Pipilo aberti. Abundant after we reach Salt River.
21. Pipilo maculatus maculatus.
22. Pipilo chlorurus. - This & the above common in places.

Oct. 21

23. Colaptes auratus. - Abundant on Salt River.
24. Sturnella neglecta.
25. Cardinalis virginianus. - One
26. Corvus corax. - A few seen.
27. Gymnopus cyanocephala. - One flock.
28. Aphelocoma woodhousei
29. Sayornis sayi. - A few scattered along.
30. Sayornis nigricans. - One on Salt River.
31. Mitrocephalus rubinus mexicanus. - Two seen on Salt River.
32. Tyrannus vociferans. - A few
33. Picus scalaris. - Rather common
34. Centurus uropygialis. - Very plentiful in Salt River Valley & the adjacent region, where they were found in mesquites cottonwoods & on the giant cactus. Genl. Cook went out with me to cut cacti

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- ... in search of Whitney's Owl. We found several Gila Woodpeckers going to roost in holes in the cacti & concluded that no Owls were in those cacti, so gave it up after cutting several down & finding both Owl & Woodpecker feathers in the hole.
35. Colaptes mexicanus. - One was seen going to roost in a giant cactus. Abundant
36. Asyndesmus torquatus. - A number seen in cottonwood along Salt River.
37. Accipiter fuscus. - Abundant
38. Accipiter cooperi. - do
39. Falco sparverius. - do
40. Buteo calurus. - Abundant: 1 shot
41. Otocorys californiana. - Two seen on Salt River.
42. Lophortyx gambeli. - Exceedingly abundant.

Oct. 21.

43. *Zenaidura macroura* a
on Salt River
44. *Ardea herodias*. - Abundant
on Salt River
46. *Ceryle alcyon*. - One on
Salt River
47. *Lerquedula carolinensis*.
48. *Podiceps*. - The Gull, same
the above on Salt River.
49. *Oxyechus vociferus*. a Salt R.
50. *Fringoides macularius* do
51. *Salamospiza bicolor*. Two

Mammals.

Lepus sylvaticus nuttalli Abundant.
Canon Squirrel. Common
Mouse. - Caught one in
a hole in a giant cactus
chopped down for Owls.
There were two in the hole.
Coyote. - One seen.

3447a. Mouse. f. juv.

52 *Melospiza fasciata*. - a
Salt RiverOct. 21st

[3448a. Mouse. f. ad, nose to eye, 13.5;
ear, 22; occiput, 28; root of tail,
100; end of outstretched hind-leg,
140. Ear, height above skull, 16;
above meatus, 18; width, 15.
Fore-arm, 14; forefoot, 9
cl., 1. Leg, 24. Hind foot
20; cl., 1.5. Tail 10.5. Oct. 22, 1884.
3448b. Mouse. f. juv. belongs to above lot.

3449. *Campecephalus brunicephalus*
♂ ad. 219; 287; 94; 87;
cul., 25; no. 17.5; gape,
30; tars., 32; mte., 28;
cl., 7.5. Irides, rich
brilliant hazel. Bill with
maxilla brownish-black,
mandible & cere - color of base
shading to ~~the~~ bluish at tip.
Tarsi & feet plumbeous.
Claws, ^{Reddish white} plumbeous - brown.

3450. *C. brunicephalus* ♀ ad.
214; 280; 85; 85 (both alike)
no. 1. 15.5; gape 29.5; tars. 30;
cul. 24.5. Oct. 21. Salt River a. y.

Oct. 22

17. Pipilo fuscus mesoleucus
18. Scolecophagus cyanocephalus
19. Sturnella neglecta. - Common.
20. Corvus corax. - A few.
21. Sayornis sayi. - Common.
22. Tyrannus vociferans. - Common.
23. Picus scalaris. - A few.
24. Centurus uropygialis. - Quite numerous both on Salt River and Mance along Canon Creek.
25. Colaptes mexicanus. - Abundant
26. Asendensus torquatus. - Quite a number on Tonto Creek.
27. Accipiter cooperi. - Common.
28. Accipiter velox. - Common.
29. Buteo borealis. - Common.
30. Falco sparverius. - A few.
31. Pandion haliaetus. - A few on Tonto Creek.
32. Minimus sparverius.
33. Zenaidura macroura.
34. Lophortyx gambelii. - Common all over (over land)

Oct. 22.

35. Oxyechus vociferus. - Common along Tonto Creek. One flock of 12 flying.
36. Ardea herodias. - One Salt River & Tonto Creek.
37. Tringoides macularius. - One Tonto Creek.
38. Auriparus. - One of these Titmice came close to me in a mesquite bush, on Tonto Creek, where I had crawled under after a wounded Phainopepla nitens. (Old nests seen)
39. Melospiza fasciata. - Several seen on Salt River and on Tonto Creek.

Oct. 22.

The men caught large strings of Bong-tails in both Salt River & Canon Creek, some weighing a couple or three pounds. Frogs like those at Verde are found in both streams as well as on the Gila & San Carlos River.

One striped Rattlesnake killed on the Santa Cruz. We passed through a large grove of bright green wooded mesquite bushes with pods like mesquite ^{wood} ~~leaves~~ the greasewood. Large white-spined cacti, "very poisonous" are common on trip.

Mammals:-

1. *Lepus nuttalli*. - Common.
2. *Lepus cal. texianus*. - Common.
3. *Thomomys*. - One around camp.
4. *Vulpes* (large) (one found)

Oct. 23.

To day we left camp on Santa Cruz River & that stream as far as where it descends from the cañon in the foothills of the Mohaves. Then we had some steep climbing for a few miles before we reached the crossing on the Wild Rye. We followed the Wild Rye to the store & there went into camp in a pouring rain. The last six or eight miles of the march having been very hard & disagreeable. The giant Cactus and Yucca were found well up into the hills after we left Santa Cruz, but they dropped before we reached Mud Spring. Two miles the other side of the Wild Rye crossing.

1. ~~Ardea~~ *Oreoscoptes montanus*
2. *Tyrannus polyglottus*. 1 or 2 -
3. *Sialia mexicana*. - A few
4. *Regulus calendula*. - Common.
5. *Phainopepla nitens*. - A few.
6. *Salpinctes obsoletus*. - Common
all along in suitable places.
7. *Dendroica coronata*. - A few.
8. *Dendroica nigrescens*. - A
few of these handsome Warblers
were seen & heard in the cotton
woods about our camp on
Fouls Creek. I shot one, but
could not find it. Their note
is sharper than *D. auduboni's*
and I at first thought its
sharp "chee" to be a soft
note of the Cardinal Grosbeak.
9. *Lanius ludovicianus excubitorides*
10. *Cardinalis frontalis*. - Abundant &
singing very loud & sweet
11. *Astragalinus hesperia*

12. *Poicetes gramineus*. - A few.
13. *Spizella arizonae*. - Common.
14. *Zonotrichia leucophrys*. -
Very abundant. Its song is
very like that of *Z. albicollis*
15. *Amphispiza bilineata*. - Common.
16. *Calamospiza bicolor*. - A few
flocks between Canon Creek &
the Wild Rye. When flying the
black lining to the wings is very
conspicuous.
17. *Junco hiemalis oregonus*. - A few
18. *Pipilo aberti*. - On Fouls Creek.
Its note an exacerbation of
the Eastern Purple Finch's call.
19. *Scolecophagus cyanocephalus*
20. *Sturnella neglecta*. - Very
common. Singing. Gentle.
Has a low note like the
Hermit Thrush's call or a
low note of a blackbird.
21. *Corvus corax*. - In flocks of
from 20 to 40 or more

Oct. 23,

22. *Syrnium cyanocephala*
Here flock.
23. *Sayornis sayi*. - Common.
24. *Tyrannus vociferans*.
Several flocks. One near
the Camp. One - about
twenty in it!
25. *Picus scalaris*. - A few
on Tonto Creek.
26. *Contopus uropygialis*. -
Many all over Tonto Creek.
27. *Colaptes mexicanus*. - Comm.
28. *Bubo virginianus*. - Few
on Mill Rye.
29. *Accipiter fusces*. - Common.
30. *Accipiter cooperi*. - Very
common. One shot.
31. *Buteo borealis calurus*.
Common. Five seen in
the air at once.
32. *Junco oreganus*.
33. *Aquila chrysaetos canadensis*
Tonto Creek saw one and

Oct. 23

- one
it was
a , but could not
get a better shot
it on the wing. Had a
carbine, I shot at it.
Killed my first Golden Eagle.
34. *Parus carolinensis*. -
Abundant on Tonto Creek.
35. *Lophortyx gambeli*. - Ex-
ceeding
abundant.
36. *Ardea herodias*. - Common
on Tonto Creek.
37. *Colaptes auratus macularius*. - A
few on Tonto Creek.
38. *Oxyechus macrotis*. -
Many all over Tonto Creek.
39. One flock of *Colaptes auratus*
Mammals.
- Lepus sylvaticus*. - Common.
- Lepus* . - Common.
- Striped Gopher. - A few seen on

Oct. 23,

7. ()
 4. Myphitis. - One skull of
 a mink collected

Note. - ^{ranch above the} OTTAWA shore on Wild River,
 learned that Red Berds are
 common there. They were
 described to me by a lady who
 called me in professionally as
 "having song like knots + red bills
 like a hawk."

Beaver. - I saw fresh Beaver
 signs on White River, the Gila,
 and on Salt River and
 Lonto Creek, and old signs
 on Pine Creek.

(Oct. 24)

To-day we left camp on the
 Wild River at 7 o'clock and
 after following that stream for
 a considerable distance, first
 over the mountains and
 down canyons, we reached a
 scrub oak and a scattered
 growth of cedar, the country very
 rolling + broken by low hills.
 We crossed several little
 streams having a few cottonwoods
 and cedar, but a large
 stream with about 100 yds. of
 "black ash" (like beech),
 "box alder" and other shrubs.
 After skirting Pine Creek a little
 way we crossed some more
 hills and took a trail
 leading down some steep,
 hillsides, densely clothed with
 a species of evergreen tree which
 I never saw before, but gathered
 specimens of both dead + living.

(Oct. 24)

Capt. Bourke called it "Yrusalen Cypress". The bark is brown like mangrove with strips of old bark. The leaves are rather small on the branches. The tree is very gnarled and twisted.

There are large areas of these trees.

At the end of the trail we found a ranch + the old ~~Native~~ Native Boys, over 100 feet high + a very grand thing. Beneath the bridge are some caves with ladders placed for entrance. They contain exquisite stuccoes + paintings and beautiful line incrustations some of which I collected.

We encamped on the stream a mile or two above in a beautiful grove of large oaks.

(Oct. 24th)

1. Merula migratoria fasciata, - a few in some places in some specimens.
2. Sialia mexicana. - Two large flocks seen in some cedars, uttering their usual call note + also a short little note like the Eastern Bluebird in autumn.
3. Regulus calendula. - Abundant.
4. S. alpinus. - Common.
5. Dendroica auduboni. - One or two.
6. Phainopepla nitens. - Quite a number seen. The males all glaucous and both sexes uttering a robin-like note - single note.
7. Amphispiza bilineata. - Common.
8. Carpodacus frontalis. - A few near the last camp.
9. Psaltriparus. - A few seen.
10. Junco hiemalis segetum. - Several.
11. Spizella socialis arizonae.
12. Contopus richardsoni. - A few seen.
13. Pipilo fuscus megalonyx.
14. Pipilo megalonyx megalonyx. The

Oct. 24.

note of this kind is like the
 whistles, while the
 above is more harsh and
 somewhat like Woodhouse's Jay.

Both species very common.

15. *Sturnella neglecta*. - Common.
16. *Corvus frugivorus*. - One
 flock seen. No Ravens seen.
17. *Abiloboma woodhousei*. - Common.
18. *Cyanocitta stelleri macrolopha*.
19. Not seen till we struck the
 cypresses near the Natural Bridge.
19. *Picus villosus*. - Not seen till
 we reached the Natural Bridge.
20. *Colaptes auratus mexicanus*
 Common all along.
21. *Ceryle alcyon*. - One or two
 seen; not shot.
22. *Accipiter cooperii*. - Scarce.
23. *Accipiter fuscus*. - Scarce.
24. *Timonius* *phaeurus*.
25. *Buteo borealis calurus*. - Common.
26. *Geothlyx gambeli*. - Common.

Oct. 24.
 No mammals.

Oct. 22.

3456. *Centurus uropygialis*. ♀ ad.
 237; 425; 130; 90; cul., 24;
 gape, 30; tars., 24; mte., 29;
 claw, 11. Shot near camp on Salt River.
3457. *Phainopepla nitens*. ♂ ad.
 200; 295; 91; 99; cul., 12;
 nost., 7; gape, 17; tars., 20;
 mte., 19; cl. 5.5. Shot on Lonto Creek.
3458. *Asyndesmus torquatus* juv.
 280; 535; 168; 105; cul., 27;
 gape, 33; tars., 25; mte., 29;
 cl., 10.5. Shot on Lonto Creek.

Oct. 23.

3459. *Centurus uropygialis*. ♀ ad.
 245; 428; 129; 93; cul., 26.5;
 gape, 31; tars., 23; mte., 29;
 cl., 11. Shot on Lonto Creek.
3460. *Centurus uropygialis* ♂ ad.
 263; 465; 140; 102; cul., 33;
 gape, 37; tars., 26; mte., 31; cl., 11.5.
 Mated with the above.

Oct. 25

15. *Amphispiza bilineata*. - Two birds.
16. *Empidonax griseus*. - Several seen along the trail, chiefly near the cornfields and millwheels. One male Cooper Hawk seen in the millwheels. It was seen in the millwheels and was seen in the millwheels. It was seen in the millwheels and was seen in the millwheels.
17. *Gymnophaga cyanocephala*. - Several seen in the millwheels.
18. *Amphispiza bilineata*. - One small flock among the birds in the millwheels.
19. *Agelaius phoeniceus*. - Common in the millwheels.
20. *Amphispiza bilineata*. - Several seen in the millwheels.

Oct. 25

- on Fossil Creek.
21. *Picus villosus parisi*. - In the millwheels.
22. *Melanerpes formicivorus*. - Exceedingly abundant. It was seen through the pines. It was seen through the pines. It was seen through the pines.
23. *Asyndesmus argutus*. - Very abundant in the millwheels. It was seen in the millwheels. It was seen in the millwheels.
24. *Colaptes auratus mexicanus*. - Common - all along.
25. *Accipiter cooperi*. - One seen.
26. *Buteo borealis calurus*. - One seen.
27. *Circus mexicanus*.

Oct. 25

Mammals -

Gray Squirrels - Common inPink Squirrels - Abundant in

Pine woods; three

Pine trees in the

Coons + Bears -

2 or 3 miles

Skunk, weasels, badgers, Danials[Oct. 24 Between the Wild River & Pine Creek
3461 Calamospiza bicolor (ad?)175; 292; 87; 72; cul, 14.5;
gape, 14.5; tars, 25; mte, 23; cl, 6.5Oct. 24. Accipiter cooperi gymis

490; 860; 269; 240; cul, 10; cere,

26; cere, 11; cul, 18.5; gape, 27.5;

tars, 67; mte, 57; cl, 11.7; ^{stomach} empty.

Irides, yellow. Both of the ab. 2 shot

near Wild River Oct. 223463 Cinclus mexicanus ♀ ad.

187; 295; 91; 55; cul, 19; mte, 12

gape, 25; tars, 31; mte, 28; cl, 8.

Irides, hazel. Bill with maxilla yellowish

brown, dusky towards tip. Mandible light yellow

shading to dusky at tip. Tarsi feet & claws flesh-colored

Oct. 25

3459 Scurus us ♀ ad.

Nose to eye, 30; ear, 57;

occiput, 69; root of tail, 280;

end of tail above hind foot, 435;

Ear, height above skull, 36;

mean, 43; ^{tail} 29

Tail from root to end, 230

hairs, 317. Forearm, 56

Forearm + cl, 42; ^{ant} 10Leg, 83; ^{hul} 6.9

Behism eyes, 35; Chest girth, 170.

Ear tufts (not incl. in height) 38

3459 Scurus us ♀ ad.

Nose to eye, 33; ear, 58;

occiput, 71; root of tail, 290;

end of tail above hind foot, 440;

Ear, height above skull, 40;

mean, 45; width, 30

Tail from root to end, 234;

hairs, 320 Forearm, 58

Forearm + cl, 48; ^{ant} 10Leg, 80; ^{hul} 6.9

Ear tufts, 40

Between eyes, 36 Chest girth, 180

(Oct. 2)

Mammals:-

1. White Deer. Herb. Cook shot one of three at 300 yards.
2. Lepus asiaticus dorsalis. Common in rocky places on way.
3. Lepus callosus texianus. - One seen at Camp 2 was the only rabbit seen.
4. Geomys. - Fresh signs were seen at Camp 2.

(Oct 2)

1. Sitta carolinensis aculeata. One only at camp 2.
2. Salpinctes obsoletus. - Very abundant in rocky places; almost gregarious; singing. Evidently migrating.
3. Tophochoerus inornatus. - In nests. Several seen.
4. Eremophila alpestris. One or two small flocks.
5. Lanius ludovicianus excubitorides. - One.
6. Carpodacus frontalis. - A few flocks.
7. Zonotrichia leucurus. - Clear Creek.
8. Pipilo aberti. - Clear Creek.
9. Pipilo fuscus mesoleucus.

Measurements of Pioneer trees
 31 1/2 inches Under River, Cottonwood

21 1/2	"	"	"	"
55 1/2	"	"	"	"
36	"	"	"	"
87 1/2	"	"	"	"
89	"	"	"	"

Copied in Journal Vol. IV, p. 114.

10. Spizella socialis arizonae. - Com.
- seen along the route.
12. Spizella socialis. - A number
seen amongst the low arbores.
in a low "thicket."
- 12 Chondestes woodhousei. - A
few among the cedars in route.
13. Gymnophila cyanocephala. -
Several flocks were seen
along the route.
- 14 Corvus corax. - A few scattered
along the entire route.
15. Sayornis sayi. - A few at
Mormon's house.
16. Picus scalaris. - In mesquites
along Clear Creek.
17. Picus villosus harrisi. - At Camp
2 one was seen.

(Oct. 2.)

18. Colaptes auratus mexicanus. - One seen at Camp 2.
19. Melanerpes formicivorus. - None seen until we reached Camp 2, where we first struck pine-trees. The species was then abundant.
20. Agelaius torquatus. - Genl. Crook saw several on the way at Camp 2.
21. Pendion haliaetus. - One seen on Clear Creek.
22. Buteo borealis cal. Several pairs.
23. Accipiter fulvus. Several seen.
24. Accipiter cooperi do
25. Immature sparrow. - Several seen.
26. Lophortyx gambelii. - Only saw one flock 2/3 way to Camp 2. Shot 9.
27. Cathartes mexicanus. - 3 birds seen together, each at my feet + killed them each at first shot.
28. Ardea herodias. - One on Clear Creek.

(Oct. 2.)

3361. Messina Quail 7 juv.
3362. Messina Quail 8 juv.
3363. Messina Quail 8 juv.

(Oct. 1.)

The Hunt party arrived at Verde at 3 o'clock. After dining at Capt. Russell's, we started out to Camp 1, at Morris' on Clear Creek. We did not reach camp until after dark. The ladies went down to see our camp and as it was late Mrs. Russell + Mrs. Weems concluded to try staying in camp all night + go into Verde by daylight.

The only birds seen were

1. Cathartes aura
2. Immature sparrow
3. Thimble erythrogaster
4. Sparrow sage

(Oct. 11)
♂ Corvus corax

Colors of no. 336 (7 col.)
 Cere, bare skin around eye and
 at base of bill, greenish-yellow
 Bill, greenish-blue at base, plum-
 -beous black at tip. Tarsi and
 feet greenish yellow. Claws,
 blue-black. Irides dark hazel.
 Shot 4 miles Verde side of Camp 3.

October 3

3364. Asyndesmus torquatus

(Skinned for Capt. Roberts) ♂ ad.

3365 Falco columbarius juv.

Shot at Camp 3, gape, 20

322; 685; 220; 148; cere +
 cul., 18; cere, 4.5; cul., 14.5;
 tars., 41; mte., 46; cl., 12.

3366. Accipiter fuscus ♀ juv.

340; 640; 210; 178; cere +
 cul., 18.5; cere, 8.5; cul., 12;
 gape, ~~20~~ 18.5; tarsus., 55;

mte., 43; cl., 11.5. Cere, saff-green.
 Bill, with maxilla blue laterally
 at base and mandible blue at
 base; residue plumbeous-black.
 Tarsi, greenish-yellow; feet, lemon
 yellow. Claws, black. Irides,
 yellow. Shot at Camp 2.

3367 Pyranga hepatica ♂ ad.

Irides hazel. Bill, with max
 + tip of mandible, blackish;
 residue of mandible, bluish.
 Tarsi + feet dusky plumbeous

claws, blackish. Shot at Camp 2.
 209; 330; 105; 91; cul, 18; gape,
 21; tarsus, 25; mte, 23; cl, 7.
 3368 Corvus rugivorus
 Iris, hazel. Bill, tars & ft. blk.
 485; 970; 327; 213; cul, 42;
 gape, 51; tars, 56; mte, 32;
 cl, 14. Shot at Camp 2.

3369 Asyndesmus torquatus ad.
 Shot at Camp 2. Irides, hazel.
 Bill, plumbeous - black, grayish
 at base of mandible. Tarsi and
 feet, plumbeous. Claws, plumbeous
 black, slightly brownish at base.
 280; 534; 172; 110; cul, 30.5;
 gape, 36; tars, 25; mte, 30;
 cl, 11.

3370 Asyndesmus torquatus
 282; 520; 167; 120; cul, 27
 gape, 33; tars, 24; mte, 30
 cl, 11. Colors as above.

Oct. 3 (Continued).

Before leaving Camp 2
I thoroughly explored the
pine woods in the vicinity
and shot off as follows:

- 1 Lewis's Woodpecker.
- 1 Long-crested Jay.
- 1 Woodhouse's Jay.
- 1 Crow
- 3 California Woodpeckers.
- 1 Sharp-shinned Hawk.
- 1 Liver-colored Tanager.

Other Birds Seen at Camp 2.

Parus montanus a large
flock among the pines
Carpodacus frontalis
Spizella socialis arizonae
Sitta pygmaea
Sitta car. aculeata
Picus villosus harrisi
Corvus corax. - Came about
Camp after the party left

to pick up the leavings
Gymnoplea cyanocephala. -
Dozens of flocks about
the camp. Mostly flying
over, but a few alighted.
Buteo calurus. - One pair
Zophophanes inornatus. - One
Colaptes auratus mexicanus
Scolecophagus cyanocephalus

Very few oaks were seen after leaving Camp 2., and the last Woodhouse's Jay was seen at Camp 2. And the Las Pucéas before we got quite to Camp 2.

After leaving Camp 2, the following species were seen en route to Camp 3: —

1. Sialia mexicana. — Common
2. Polioptila caerulea
3. Sitta pygmaea
4. Sitta aculeata
5. Astragalinus phaltrix
6. Poocetel gramineus confinis.
7. Zonotrichia leucophrys.
8. Meleagris gallopavo mexicana

Sgt. Martin shot one near Camp 3 from a flock.

- 9 Falco columbarius
- 10 Accipiter fuscus.
- 11 Buteo borealis calurus
- 12 Cyanocitta stelleri macrolopha
13. Asyndesmus torquatus
- 14 Gymnopus cyanocephalus.
- 15 Picus villosus harrisi
- 16 Melanerpes formicivorus
17. Junco hiemalis dorsalis
- 18 Corvus corax (over)

19. Columba fasciata. - I saw one pair, flushed from the ground beneath some oak-tree, where they were eating acorns. Capt. Roberts also saw one pair.

Capt. Russell saw a large Pine squirrel (Sciurus aberti, Woodh.), the first seen on the trip.

Bear Killed by Gul. Crook

Several bands of Deer Seen.

Lepus Callosus texianus

Thomomys talpoides nubilus

October 4th

15 Bubo virginianus

One heard at Camp 3 before daylight.

29 Buteo borealis calurus.

38 Accipiter fuscus

46 Falco columbarius

19 Fimunculus sparverius

20 Buteo swainsoni. - First seen after we arrived at camp 4.

77 Falco peregrinus. - One was shot at sitting on the rim-rock beside Lonto Basin.

22 Meleagris gallopavo mexicana.

Capt. Russell shot one from a flock of twenty or more.

Sgt. Martin found a flock of 100. Shot one & wounded another with his carbine. A third flock was seen near camp 4 containing some fine old gobblers.

23 Columba fasciata. - I saw

Oct. 4th3370a. Sciurus hudsonius f ad.~~33~~

Nose to eye, 24; ear, 44;
 occiput, 53; root of tail, 197;
 end outstretched hind leg, 212.
 Between eyes, 26.5. Forearm, 38.
 Forefoot, 34; longest claw, 7.
 Leg, 50; hind-foot (cl.) 45.
 Claw, 7. Tail from root
 to end vert., 130; hairs, 175.
 Ears height above sk. 20; meatus 24.
 3370 Sciurus hudsonius f ad.

Nose to eye, 23; ear, 46;
 occiput, 55; root of tail, 205;
 end of outstretched hind leg, 325.
 Between eyes, 28. Forearm, 39;
 forefoot + cl., 35; cl., 7.
 Hindfoot + cl., 46; cl., 7.
 Leg, 52. Tail from root to
 end vert., 135; hairs 180.
 Between eyes, 28. Ears
 height ~~at~~ from skull, 24, 22
 from meatus, 26; width,
 23.

197
 175
 372

bird flying. Others of the party
one, ~~flushed~~ flushed from the
ground, where they were
eating acorns beneath the
oaks. These acorns are as
sweet as Chestnuts, and the
pigeons feed chiefly on them.
~~Capt. Robert saw a pair also.~~

10. Cyanocitta stelleri macrolopha
Very abundant & vociferous

11. Gymnophila cyanocephala. -
A number of flocks were seen
all the way from Camp 3 to 4.

12. Dendroica auduboni. - The
first, in flocks were found near
Camp 3. First seen.

13. Junco hiemalis dorsalis. Very abundant.

14. Regulus calendula. - First seen

15. Parus montanus. - Very abundant.

16. Sialia mexicana

17. Certhia familiaris

18. Sitta carolinensis aculeata

19. Sitta pygmaea

20. Salpinctes obsoletus. One

Oct. 4.

3370c. Tamias

♂

♂ ad.

nose to eye, 17; ear, 3.0;
 occiput, 38; root of tail, 140;
 end of outstretched hind leg, 210.
 Humerus, 24; forefoot, incl. 18;
 cl., 5; Leg, 37; hind
 foot + cl., 33; cl., 4.5.

Between eyes, 15; Ears,
 height above skull, 14;
 from meatus, 17; width, 14
 Tail, from root to end vert.,
 96; hairs, 120; Ears,
 pointed.

(20. Continued)

Seen at Camp 4, the first since
 before we arrived at Camp 2

21. Picus villosus harrisi

Very abundant

22. Melanerpes formicivorus

Abundant.

23. Asyndesmus torquatus a

number seen.

24. Colaptes auratus mexicanus

Oct. 4

3371 Picus villosus harrisi ♂ ad.
 240; 424; 130; 94; cul., 32.5
 gape, 33.5; tars 24; int. 24; cl.
 10.5; ~~2.5~~

3371a Sciurus aberti ♂ juv.
 no measurements taken

Mammals seen:

1. Mus mus.2. Peromyscus3. Peromyscus californicus4. Sciurus harrisi5. Sciurus harrisi6. Sciurus aberti

Oct. 4

Several seen & heard.

25.

3372 Junco. dorsalis ♂ ad.176; 270; 87; 82; cul. 13; gape 14
tars. 22; mte. 20; cl. 6;
iris hazel.

October 5th

1. Mule Deer. - Steward Dore saw
 3. Genl. Crook saw 2.
 2. Sciurus aberti. - Genl. Crook shot
 3, one of which was melanotic
 3. Sciurus hudsonius fremonti. - Several
 were seen, always in ravines
 where the fir & spruce grows.
 All were gathering for food
 the large cones of the spruce.
 These Squirrels have not been
 seen in other localities than
 these valleys, which are grown
 with Swamp maple as bright
 red in autumn as the Eastern
 maple. There are Pyrolas,
 Asters, Solidagos with heads as
 large as Squarosa & others off of
 Solidago, Sambucus, Hamamelis
 a plant like Sambucus contain-
 ing fruit as large as cranberries
 of vivid scarlet. Elders with
 large bunches of pleasant
 tasting fruit, a fruit like

Oct. 5

the common whortleberry, but had tasting Violas of more than one species. The woods bear a strong resemblance to the new Eng. & Middle States ~~pine~~ woods in these scattered ravines. The pine woods are like a park, with only grass & flowers of endless variety & beauty growing beneath. I saw monk's hoods & many other legumes; the monkshoods only grow in damp ravines.

To-day I saw some large Coralorrhizas two feet high. They were seen yesterday near camp 4. There were Blue closed gentians.

4. Scorpius - Gophers very common throughout the route but none of the animals seen. Only plenty of fresh signs.

- ~~5. Scorpius aberti~~
- ~~6. Scorpius undecimus Arizonae~~
- ~~7. Scorpius striatus Star.~~

Oct. 5.

Birds: -

1. Turdus hellasi auduboni. - The first bird shot after leaving Camp 4 was this, the only one I have ever seen. Shot in an oak in the pine woods.
2. Sialia mexicana. - Common living in the thick pine woods
3. Regulus calendula. Common, especially in the brushy ravines
4. Parus montanus. - Abundant
5. Sitta pygmaea. - Abundant.
6. Sitta carolinensis aculeata. "
7. Certhia familiaris. One or two
8. Dendroica auduboni. - Abundant.
9. Empidonax flaviventris. - One shot in a bushy ravine.
10. Loxia curvirostra. - Several large flocks flying with much chattering amongst the firs near camp 5 & at Camp 5
11. Junco hiemalis dorsalis. - Very abundant.

Oct. 5.

12. Scolecophagus cyanocephalus
Only at Camp 4 as we were leaving.
13. Glark's Crow A number
seen in a ravine near
Camp 5. One shot.
14. Cyanocitta stelleri macrolopha
Very common
15. Gymnospiza cyanocephala
Several flocks seen between
Camps 4 & 5.
16. Asyndesmus torquatus,
Occasionally seen.
17. Colaptes auratus mexicanus
One or two seen.
18. Melanerpes formicivorus
A few seen.
19. Picus villosus harrisi
Abundant.
20. Sphyrapicus varius nuchalis
One shot.
21. Sphyrapicus williamsoni
One shot.

Oct. 5.

22. Buteo swainsoni. A few.
 23. Buteo borealis calurus. - A number seen. Capt. Roberts shot 1.
 24. Falco columbarius. - One or 2.
 25. Falco peregrinus. - One adult shot but fell down the cliff into Santa Basin where it could not be recovered.
 26. Columba fasciata. - I shot one on top of a huge pine & saw one other. Genl. Crook shot one's head off with his rifle. Scarce.
 27. Thuleagris galopavo mexicana. Capt. Phillips saw a large flock. Genl. Crook shot one young one from a brood. It was the size of a hen.

3373 Columba fasciata ad.
 370; 645; 205; 150. cul 17;
 gape, 25.5; tars 30; mte, 40; cl. 11
 Iris bright hazel. Bill, orange-yellow.

with a broad terminal band of black. Skin around eye, red
 Tarsi & feet, straw-color; claws black.

2

Oct. 5.)

3373^a *Sciurus aberti* ♂ ad.
 Melano. Shot by Genl. Crook.

~~9.12.1908; 208~~
 Nose to eye, 31; ear, 56;
 occiput, 71; root of tail, 290;
 end of outstretched hind-leg, 233;
 Forearm, 56; hind foot, 47; cl, 10
 Leg, 78; hind foot, 64; cl, 11
 Tail, vert. 208; hairs, 303
 Ears height above skull, ^{hs 50} sk 35;
 meatus, 44; width, 27
 Between eyes 40
 Chest girth 180.

3373^b *Sciurus hudsonicus* ♂ ad.
 Nose to eye, 22; ear, 45; occip. 55;
 root tail, 210; hind ft. 330; Fore-
 arm, 39; hind ft. 35; cl, 7
 Leg, 55; hind ft. 51; cl, 7
 Tail, vert. 127; hairs, 168; Ears,
 height above skull, 21^(skull); meatus,
 26; width, 22. Between eyes 29
 Ears, rounded.
 Chest girth, 128. Total length,

Oct. 5

3373^c *Sciurus aberti* ♂ ad.
 Shot by myself.

Nose to eye, 29; ear, 52;
 occiput, 69; root of tail, 270;
 end of outstretched hind-foot, 425.
 Forearm, 56; hind foot, 59; cl, 10.
 Leg 80; hind foot, 61; cl, 10.5
 Tail vert., 200; hairs, 280
 Ears, height above skull, ^{hs 50} sk 35;
 meatus (sk) 44; width, 28
 Between eyes, 36. Ears, rounded.
 Chest girth 180

168
 210
 378

3374 Clark's Crow - d. d.
 Iris, brownish; legs, feet
 & claws, black. 320; 580; 997; 128
 Cul., 42; gape, 46; tars. 36
 mte. 34; el., 13. ^{crop filled with} ^{green}

3375 glocichla - d. d.
 195; 324; 108; 80; most
 11.5; gape, 23; tars. 31;
 mte., 22.5; el., 5.3.

Iris hazel. Bill brownish-blk,
 flesh-color on base of mand.
 Tarsi flesh-color; feet, fleshy
 brown, claws, dusky.

3376 Parus montanus f. ad.
 134; 275; 75; 66; 11;
 gape, 12; tars., 1; mte 13-
 el., 5.5. Iris, hazel.

3377 Sphyrapicus Williamsi
 234; 425; 136; 100; cul 25
 gape, 30; tars., 21.5; mte
 23; el., 9.5. Irides, reddish
 brown. Bill plumbeous-black. Tarsi
 & ft., plumbeous; claws, black.

1 Oct. 5

33 78

Bulwer's Petrel
 ♂ ad. Iris, hazel. C. Crest skin
 at gape, yellow. Bill, greenish
 blue at base shading into plum-
 -beous black at tip. Tarsal and
 feet, yellow. Claws black.

580; 1360; 420; 260; cul.
 26; tars., 15; mte., 26;
 d 9; 84; 69; 22

90; 45. Stomach empty.

✓ 33 79. Sphyrapicus varius nuchalis

♂ juv. 210; 386; 124; 80; cul 21.5;
 gape, 25; tars., 22; mte., 23; d 9

Oct. 6.

1. Sialia mexicana, abundant
2. Regulus calendula "
3. Parus montanus "
4. Sitta carolinensis, abundant
5. Sitta pygmaea "
6. Turdus auduboni "
7. Carpodacus cassinii. Several flocks were seen the first I over saw. They were singing heartily.
8. Passerculus savanna. One seen near camp 6. in a little marsh surrounded by pines.
9. Zonotrichia leucophrys. One seen near camp 6.
10. Spizella socialis arizonae. A few seen mostly in the pines. - mixed with Spizella breweri.
11. Junco hyemalis. - Very abundant.
12. Corvus corax. - One pair.
13. Gyanocitta stelleri macrolopha. - Very common. One note is like the Blue Jay's harshest note, and it produces with a trill.
14. Common. One note is like the Blue Jay's harshest note, and it produces with a trill.

Oct. 6

14. Gymnopus cyaneus - A
few black seeds in the
road, leading to seeds of pines
15. Picus pubescens gairdneri. One
seen & shot as it was flying
among the terminal branches of
the pines mixed as P. n. f.
with which it does resemble. They
not be characteristic
16. Picus villosus harrisi, abundant
17. Colaptes auratus mexicanus,
a few scattered
18. Scops asio - One seen in a
cleft of rock on the same rocks
of Pinto Basin
19. Buteo borealis calurus, - common
20. Buteo swainsoni, - One
21. Falco columbarius, - several
22. Meleagris gallopavo swainsoni. - One
Crook killed one of a flock.
& Capt Russell saw a flock.
23. Columba fasciata. - Three
seen, the first on top of dead pines

1 Oct. (L.)

3380 Sitta pygmaea ♀ ad.110; 198; 62; 38; cul., 14.5;
gape, 16.5; tars, 14.5; mtc
15.5; el., 6.3381 Cyanocitta stelleri macrolopha♀ ad. 302; 458; 143; 133
cul., 28; gape, 32.5; tars 43
mtc, 32; el., 9.53382 Cyanocitta stelleri macrolopha♂ ad. 310; 475; 143; 143; cul., 28;
gape, 33; tars, 45; mtc, 35; el., 113383. Parus pubescens gracilis ♂ ad.

179; 315; 101; 78; cul., 18;

gape, 22; tars, 17; mtc 19; el., 11

Iris reddish-brown; bill

blackish; feet black; claws

blackish; toes blackish

3384. Carpodacus cassinida

163; 276; 86; cul., 19;

gape, 15; tars, 19; mtc 20;

el., 6. Irides, hazel

3385. Carpodacus cassinida ♀ ad.

162; 277; 86; cul., 19; gape, 12.5;

gape, 16; tars, 20; mtc, 20; el., 6.5

Irides, hazel

The birds were

thickly wooded with firs and

a few oaks and had flowers

white and with bright red

aspens. No fir or spruce

3386 Zonotrichia leucophrys ♂ ad.

170; 256; 81; 79; cul., 12.5; gape

13.5; tars, 24; mtc 23; el., 6.5

2 - 7thTamias - 5 -Melospiza - in Indian guide
showed at head of the headCorvus2 Corvus - Every where on route3 Corvus4 Gonyleptus Bat.Oct 7th

- 1 Seal americana
- 2 Regulus calendula
- 3 Parus montanus
- 4 Sitta carolinensis
- 5 Dendroica auduboni
- 6 Junco hiemalis dorsalis
- 7 Corvus corax, - seen at Camp 6
- 8 Ceryle alcyon, - 1 pair at
the head of Canon Creek
near Fort Baker
- 9 Procyon villosus leucis
- 10 Asio cinereus torquatus, - Found
the feathers near Camp 6 &
saw some at Camp 7.
- 11 Empidonax auratus, occasional
Several seen between Camps
- 12 Accipiter hudsonius, - One seen
- 13 Querquedula luciae, - One
in lake pool beside ranch
at head of Canon Creek
- 14 Cyanocitta stelleri
- 15 Tyrannus caerulescens
- 16 Picicorvus columbianus, One

Veratrum with
slenderer stems than Viride
grows along the Creek by Camp 7.
I have seen it in rich damp
places before.

A new species of Salix of
delicate purple color first seen
to-day in St. Louis basin, growing
in a damp place.

between Camps 2
+ 3, N.

The small-leaved oak (Quercus oblongifolia)
which grows at Thupke
was first seen to-day as we
got down to Donald.

The large-leaved oaks were
first found between Camps
2 + 3 near the scrub oak
creek.

There are a few spruces
here at Camp 7.

A new species of grape grows
here, prostrate, small round
leaves, large (open bunches of)
grapes with disagreeable musty
flavor.

A pretty purple Geranium
(Crigeron).

A miniature holboell with
a small Scilla terrestris, and
some other legumes.

The goldenrods are very common.

(Oct. 7.)

✓ 3387 Sphyrapicus varius nuchalis ♂ ad.
 226; 408; 130; 94; cul., 25;
 gape 28; tars., 22; mte., 22;
 cl., 9. Iris, reddish-hazel.
 Bill, dusky plumbeous. Tarsi
 + feet, plumbeous; claws, dusky.
 Shot in Camp 7.

~~33 . Merula migratoria propinqua
 juv. no white on tail,
 265; 435; 146; 122;
 nost., 14; gape, 28; tars 34
 mte 30 cl., 7.5; Irides hazel
 Bill, brownish black, slightly
 yellow at base of mandible, legs
 feet + claws, brownish-black;
 bottom of feet yellowish~~

~~33 . Junco hemalis oregonus
 149; 238; 72; 69; cul., 11.5;
 gape, 12.5; tars., 20; mte 18; cl.,
 5.5. Irides, hazel. Bill, flesh-color
 very slightly tipped with blackish.
 Tarsi + feet, brown; claws, dusky.~~

(Oct. 7.)

33.

Eupidonax

145; 234; 72; 65; most, 8;
 gape, 15; tars., 17; mte., 14.5;
 cl., 5. Iris hazel, Bill, brownish
 black, with basal $\frac{2}{3}$ of mandible
 pale fleshy brown. Tarsi, feet + claws
 black.

3387a Scenius aberti

Fad. 66

Nose to eye, 28; ear, 54; occiput
 root of tail, 263; end of outstretched
 hind-foot, 443. Balance eyes
 37 Fore-arm, 54; fore-foot, 48;
 longest claw, 10; leg, 80; hind
 foot, 66; longest claw, 11

Tail from root to end of hairs

290 Vertebrae, 210 Ears, height
 above skull, 36; meatus 44;
 width, 28. Ears measured to
 skin, hairs 7 above skin. Chest girth,
 185

(October 8.)

1. Merula migratoria propinqua
Quite a number seen along
the route
2. Sialia mexicana, Common.
3. Regulus calendula
4. Parus montanus
5. Tophophanes nigratus. - Not
seen till we got through the
pineries near Camp 8. Among
cedars & junipers, scarce.
6. Sitta carolinensis aculeata
Abundant in the pines
7. Sitta pygmaea, do
8. Syntropha auduboni, Common
9. Procytes griseus caninus
A few at Camp 8.
10. Zonotrichia leucophrys. Abundant
at Camp 7.
11. Spizella socialis arizonae
12. Junco hiemalis oregonus. -
A few at Camp 7. Gradually
growing abundant as we
descended, while dorsalis

(October 8)

grew scarcer as we got out of the jungle.

13. Phalaena maculata long

14. Phalaena maculata long,
a few near Camp 7.

15. Corvus corax, - One pair seen

16. Corvus frugivorus, - A few
scattered individuals + one
large flock at Camp 8.

17. Myiophila cyanocephala.

Large flocks alighting on
the ground, the creosote bush
continually flying ahead,
and so progressing. The whole
flock yelling like sixty.
The attack hawks and vultures
an awful din.

18. Aphelocoma woodhousei

One or two at Camp 7, and
increasing in numbers all
the way to Camp 8.

19. Lyanocitta ultramarina
arizonae, - A few at

1 Oct 6

Agelaius herodias - *Agelaius*
3 on 1st *C. herodias*
Ceryle alcyon

(October 8)

Camp 7 & Mince to Camp 8
~~where~~ a few occasionally
 seen. Their cry is: "Peel-
 fe we - we" They usually
 associated with Long-crested Jays

20. *Cyanocitta stelleri macrolopha*

All along the route abundant

21. *Asendramus torquatus*

Abundant all along the route

22. *Melanerpes formicivorus*

Fairly abundant.

23. *Sphyrapicus nuchalis*.

Common all along the route

24. *Prus villosus*. - Only
 one seen.

25. *Colaptes auratus mexicanus*

Very common

26. *Buteo borealis calurus*

A few near Camp 8

27. *Buteo swainsoni*

One at Camp 8

28. *Melanerpes gulapavo*

mexicana, An

(Oct. 8.)
G. T. Fieberger.

3388^a, Scurius aberti ♂ ad.
Nose to eye 28; ear, 52;
occiput, 66; root of tail, 285;
end outstretched hind leg, 445-
Tail from root to end of hairs,
315; vertebrae, 235. Ears
width, 28; height above skull,
31; above meatus, 39
Between eyes, 32
Forearm 53; forefoot, 46
Claw, 11. Leg, 82
~~hindfoot, 66~~; Claw, 11
Ear-tufts, 19; hindfoot 67.
Chest girth, 175

Mammals: -

1. Scurius aberti
2. Thomomys talpoides umbrinus.
3. Lepus callosus texianus.
4. Thomophilus grammurus

(Oct. 8.)
Indian shot 3 with rifle
& wanted me to buy them
for \$1. each.

3388. Cyanocitta ultramarina
arizonae ♀ ad.

330; 517; 165; 152; cul.,
29; gape, 35; tars 45-
mtc, 35- cl. 11

Irides hazel. Bill mottled
black & yellow. Tarsi feet &
claw jet black.

(Some tail-feathers shot out)

3389. Cyanocitta ultramarina
arizonae ♂ ad.

340; 525; 168; 162; cul.,
30; gape, 36; tars 44;
mtc, 36; cl. 11. Colors as above

3390. Asyndesmus longirostris
♂ ad. 275; 535; 167; 100; cul., 27;
gape, 35; tars, 25; mtc. 32
claw, 11.

3391 *Ammodramus torquatus*
 285, 550, 172, 109, cul,
 30; gape, 35; tars, 29; mte 30;
 el, 11

3392. *Columba fasciata* ad.
 300, 635, 207, 146, cul 18
 gape, 24; tars, 24; mte 30
 Color like

October 9.

1. *Lurdus* [unclear] -
2. *Oroscoptes montanus* - A
 pen + one shot
3. *Sialia mexicana* - Abundant
4. *Regulus calendula*
5. *Empidonax hammondi*
6. *Sitta carolinensis* - A few
7. *Dendroica auduboni* - "
8. *Pyrranga ludoviciana* - One
 shot.
9. *Myiadestes townsendi* - Several
 seen in a little canon; they
 have a very clear sweet
 call-note, and were singing
 exquisitely. One that I shot
 crawled under the rock at
 the bank of the little brook
 in the canon + could not be
 got at. They make a whirring
 sound like a woodpecker
 when flying from branch
 to branch

(Oct. 9)

Large flock seen all
along road. Some con-

-tained orange 22-25

22. Gaucoilla stelleri maculosa -
Accordingly abundant all along

23. Gaucoilla ultramarina arizonae
Abundant all along. One shot

24. Apelocornis woodhousei, - Com-
mon all the way

25. Picus villosus harrisi, One.

26. Sphyrapicus varius nuchalis
Abundant

27. Melanerpes formicivorus
Abundant

28. Isodactylus torquatus

Quite plentiful

29. Colaptes auratus mexicanus
Abundant all the way

30. Melospiza melodia, - Abundant

31. Buteo borealis calurus. Several
pairs seen.

32. Falco columbarius - One

(Oct. 9.)

- 33 *Columba fasciata*. - In
flocks of 25 to 100.
More abundant than hitherto
In the pines they were
single or in twos or threes.
In the cedars & junipers
lower down (yesterday), a
few flocks of 5 and 10
were seen. To-day they
were in large flocks.
The timber along the route was
juniper, cedar, fir, a few
pines and cottonwood & abundant
oak trees both small & large
leaved.

34. *Lophortyx gambeli*. - One
flock between Camp Capt.
Roberts. Shot one.

35. ? *Trochilus alexandri*. -

- Genl. Crook saw one &
36. *Molothrus* also common
A few about the water on
Camp 9

Oct. 9.

3393. Cyanocitta ultramarina
ariz. ♂335; 510; 172; 158; cul., 30
gape 36 tars 41 mtc 36
cl 113394. Pyranga ludoviciana. ♂ juv
185; 296; 92; 72; cul. 15
most 11 gape 19 tars 17.5 mtc 17
cl. 5.33395. Oendeleus tosquatus
♂ ad. 287; 527; 168; 104;
cul., 29.5; gape, 34; tars 28
mtc, 30; cl, 11

Oct 15.

The Cañon is about 1/2 mi. long.
Clear creek. The water is
in the center of the Cañon. To a
large branch of the river
- a narrow stream - which flows through
a deep, beautiful Cañon.
The banks are covered with cottonwood
trees. The water is very
handsome. (Populus angustifolia)
cottonwood & which

These were the same as
seen at the mouth of the
Cañon. (Populus fremontii)
on the river. The water is
very clear. The banks are
covered with cottonwood trees.
(Populus tremuloides).

(Oct 15.)

- Set: 1. *Cyanoccephalus*
The flock still here, but
began to fly. The bird, although he killed
several. 2. *Querquedula carolinensis*
One seen on the Corisa (not
spotted winged teal). 3. *Melospiza*
The birds were seen on the Corisa.
The birds were seen on the Corisa.
at 8 o'clock the weather - soon
became fair. We reached Fort
Dale soon after four o'clock.
4. *Myiadiestes townsendi*. - A full-
heard singing in a deep Cañon
a beautiful song
5. *Sialia mexicana*. - Common
6. *Regulus*
7. *Lophophanes inornatus*. - A few

in ~~Fare~~ *certus*.

8. *Sitta pygmaea*. - A few when reached the lake near Camp 10.

9. *Sitta carolinensis aculeata*. - A few

10. *Merula migratoria propinqua*. - One or two near Camp 9.

11. *Dendroica auduboni*. - Common.

12. *Astragalinus psaltria*. - Large flocks in the creek bottom at Camp 9, feeding on sunflowers. Also seen occasionally in the woods.

13. *Salpinctes obsoletus*. - A few seen in the grass along the mesa above the Rio Conchos. Note a loud "cheek."

14. *Junco hiemalis oregonus*. - Common.

15. *Spizella socialis arizonae*. - Common.

16. *Zonotrichia cophrys*. - A few.

17. *Pipilo maculatus megalonyx*. - Common in places.

18. *Corvus corax*. - Common.

19. *Corvus l. ...* - A few in the creek bottom.

(Oct. 10.)

20. Gymnophis apaneas. - Com-
-mon all along the route,
but in small numbers.

21. Apeltes woodhousei. - Com-
-mon until we get in timber
zone and then it is scarce.

24

The ... Co
rolled ... + I went to the
bottom. A stone struck me on the
head + another on the shoulder
but did not injure me except
to stiffen me up some.

22. Cyanocitta ultramarina
arizonae. - Quite a few seen
before we crossed the

23. Cyanocitta stilleri macrolopha
Very common all along.

24. Picus vellosus. - A few.

25. Melospiza formicivora. -
Common after we reach the river

(October 11)

26. Geothlypis trichas.
Common in the pines. Their
notes when flying in flocks
are like a "chirp".
27. Colaptes auratus mexicanus.
Common all along.
28. Falco columbarius, Acc.
near Camp 10.
29. Colinus macrurus.
General saw.
30. Hylocichla ustulata,
at Camp 9 on Coriza + one
or two more
reached the Corduroy Creek
31. Ceryle alcyon. Several were
fishing in the Carrizo.
32. Sayornis sayi. - One was
shot on the mesa above Corduroy.
As I was picking it up, it flew
and was circling about for
some minutes before it finally
disappeared in the distance.

(Oct. 10)

3396, Asendemus longuatus ♀ ad
 272; 52; 165; 112; cul 27
 gape 33; Tar 23 mte 27 el 10
 3397, Asendemus longuatus ♂ ad
 280; 540; 175; 106; cul 29
 gape 35 Tar 26 mte 30 el 11

(Oct 11.)

Left Camp 10 at 5:45 A.M.
and got in to Camp 11, sixteen
miles from Ft. Apache, on the
Holbrook road at 1:30 P.M.

1. Merula migratoria propinqua
2. Sialia mexicana, Common
in small flocks.
3. Regulus calendula, - blue or here
4. Sitta carolinensis aculeata
5. Sitta pygmaea, Both Sittas com.
6. Tophoephanes minoratus, A few
near Camp 11.
7. Dendroica auduboni, - Common
8. Astragalinus psaltria, - A few.
9. Spizella socialis arizonae, Com.
10. Junco hiemalis oregonus, "
11. Junco hiemalis dorsalis, "
12. Zonotrichia leucophrys, "
13. Sceloporus cyanocephalus, A
few before we left Forest Grove
14. Corvus frugivorus, - A few
near Camp 11.
15. Corvus corax, A few

(Oct 11)

Measured the largest oak seen to-day. Circumference a little over 3 metres. Estimated height 20 metres.

Pines were seen over a hundred feet in height and about 6 metres in girth.

The small leaved ^(Quercus oblongifolia) oaks were seen during the last half of the way & are abundant with the large leaved here at Camp 11.

A beautiful dark red Serris was found, and a handsome fragrant mustard-yellow. Strawberries (Fragaria) plenty also Violas.

A small pine with little cones grows on the mountain. Fir trees were numerous.

(Oct. 11)

16. Cyanocitta stelleri macrolopha
Very Common. It has a mellow whistle beside its various cries.

17. Lynniopica cyanocephala
A few seen.

Steller's Jays are great fighters & pester all kinds of Hawks & Owls, assembling in great flocks to amuse themselves in this way. To-day they were worrying a Red-tail & a Sharp-shinned Hawk.

18. Empidonax

One was shot in the pines on the highest ridge of the mountain over which we crossed.

19. Picus villosus. harrisi. A few

20. Melanerpes formicivorus
Common. Saw the holes bored by them to store acorns in dead trunks.

(Oct. 11.)

Mammals.

1. Procyon nigripedes. - A Raccoon was shot at in some rocks by Capt. Roberts.
2. Sciurus aberti. - Genl. C. Shot three. I shot one. Several times they have escaped me; but this one I secured after half an hour's work. He was at last discovered clinging to the very topmost bough of the tallest pine in the place. I had supposed they had holes in the living trees they eluded me so completely; but I now think they owe their safety to their cunning in concealing themselves in the tree-tops.
3. Geomys as usual.
4. Deer seen near Camp 11.

(Oct. 11.)

21. Asendornis torquatus. Very common. They squeak like flickers and chatter when playing exactly like squirrels.
22. Sphyrapicus varius nuchalis was seen once only.
23. Accipiter fuscus. One.
24. Buteo borealis calurus. - Several seen; one shot.
25. Colaptes auratus. - A flock of half-grown young & one old male leading was seen at Camp 11 by Genl. Crook.
26. Columba fasciata. - Three seen. I shot one.
27. Zenaidura macroura. Capt. Roberts saw one at Camp 11 near Ft. Apache (15 miles).

(Oct 11.)

3398. Empidonax

♀ ad.

137; 222; 66; 60; not 7;
gape, 14; tars 17; mte 13; cl 4.53399. Melospiza formicivora

♀ ad, 233; 455; 145; 89;

cul., 27; gape, 31; tarsus, 20.5;

mte., 25; claws, 9. Irides, white

Bill, blue-black. Tarsi & feet

plumbeous; claws, dusky; plumbeous

3400. Acynodesmus torquatus ♂ ad.

Skinned for Dr. Fisher

3401. Acynodesmus torquatus, ♂ ad,

282; 545; 176; 108; cul. 30;

gape, 36; tars 27; mte 30; cl 11

Oct. 12.

Mammals:

1. Sciurus aberti. - Genl. Creek
 Shot one & 3 shot one. This
 species is abundant about Apache

2. Tamias (dorsalis?)

- (3402.) Passerculus ochrocephalus, ♀
 148; 270; 82; 59; cul., 10.5; gape,
 12; tarsus, 20.5; mite, 19.5; cl. 6

- (3403.) Passerculus ochrocephalus, ♀
 152; 273; 81; 63; cul., 11; gape, 12;
 tars., 20.5; mite, 18.5; cl. 6.

- (3404.) Passerculus ochrocephalus ♀.
 152; 267; 79; 57; cul., 10.5; gape,
 12; tars., 20; mite, 18; cl. 5.

- (3405.) Passerculus ochrocephalus ♀.
 148; 264; 82; 60; cul., 10; gape,
 11; tars., 19; mite, 18; cl. 5.

Irides, hazel. Bill, with maxilla
 above & tip of mandible, dusky-brown;
 residue, flesh-color. Tarsi & feet, brown;
 claws, dusky

2. Sciurus aberti. - Genl. Creek
 3. Sitta carolinensis
 4. Sitta pygmaea
 5. Lophophanes inornatus,
 6. Dendroica auduboni, - abundant.
 7. Poocetes gramineus confinis
 8. Passerculus ochrocephalus, - In
 good sized flocks in the short
 grass by the roadside. They
 utter a sharp "cheep" as they fly
 and keep in close flocks like
 larks, common on the prairie
 till the middle of the month
 close together, and
 close & then fly off
 before they fall.
 9. Junco hyemalis (common)
 10. Junco hyemalis (common)
 11. Pipilo maculatus (common)
 12. Scolecophagus cyanocephalus
 Large flocks by the roadside
 & in pine-trees also abundant

(Oct. 12.)

13. *Tyrannella stictus* *maculipennis*
14. *Gymnophila cyanocephala*
15. *Corvus corax* - Very abundant
about Apache
16. *Picus villosus* *l. l.*
17. *Isorhamphus torquatus*
18. *Melanerpes formicivorus* } abundant
19. *Geothlypis trichas* *massena*
20. *Buteo borealis calurus*
21. *Accipiter fuscus* - One caught
Brewer's Woodpecker at Apache
22. *Junco oreganus* *shufeldti*
23. *Contopus v. massena*, One shot
24. *Columba fasciata*
25. *Melospiza galapago-mexicana*
One flock crossed the road in
front of the General,

There are plenty of deer
found in the sierras near
Fort Apache; but only a very
few at present were
seen all along the South
Fork. After the two forks
unite (just at the Post Hospital)
the suetters are found in
abundance; and there are
a good many trout here.

(Oct. 13)

17. *Cyanocitta stelleri macrolopha*.
18. *Chondestes woodhousei*
19. *Gymnopus cyanocephala*
20. *Picus villosus harrisi*

21. *Sphyrapicus varius nuchalis*
22. *Melanerpes formicivorus*

Very abundant. *Storniyacorus*

23. *Colaptes auratus mexicanus*
Exceedingly abundant.

24. *Columba fasciata*. A few
25. *Accipiter* *gambelii*
26. *Junco oreganus*

27. *Buteo calurus*. One shot.
28. *Melospiza galopavo mexicana*
29. *Bubo virginianus*

No. 3406. *Sphyrapicus varius nuchalis* ♂ ad.

Verges towards var. *puber*.

- 225; 403; 128; 90; cul., 26; gape,
28; tarsus, 21; mte., 23; cl., 9.

3407. *Gymnopus cyanocephala* ♂ ad.

- 301; 486; 154; 120; cul., 37; gape,
40; tars., 39; mte., 34; cl., 10.5.
Iris, hazel. Bill, tarsi, feet, and

Oct. 13

claws, black.

3408. Gymnospiza cyanocephala, ♀ ad.
281; 462; 143; 112; cul., 34;
gape, 37; tars., 37; mte 30; cl. 9.

Colors like 3407. Crop full of
acorns from the small-leaved oak.

3409. Aphelocoma woodhousei, ♀ ad.
297; 403; 122; 141; cul., 26.5;
gape, 30.5; tars., 40; mte., 31.5; cl. 10.

Irides hazel. Bill, legs, feet & claws, black.

3410. Aphelocoma woodhousei, ♂ ad.
315; 420; 130; 155; cul. 27; gape, 31;
tars., 42; mte 31; cl. 9.5. Colors like 3409.

3411. Junco sparverius, ♂ ad. ^{Ext. Chache}
272; 483; 92; 136; cul. & cere, 16; cul.,
4.5; cul., 12.5; gape, 17.5; tars., 37.5; mte 32; cl. 10.

3412. Colaptes mexicanus, ♂ ad.
325; 550; 165; 121; cul. 38; gape, 42;
tars., 32; mte, 34; cl., 11.5.

3413. Junco hiemalis oregonus ♀ ad.
157; 237; 74; 73; cul., 12; gape,
12.5; tars., 21; mte, 20; cl., 6.

(Oct. 14)

Genl. Crook asked me to
stay behind and assist
Fisher, the Post Surgeon, to
perform the operation of
removal of bone in the
leg.

Worked in the hospital
until 11:15 P.M. The following
birds were noted:

1. Merula migratoria propinqua
2. Sialia mexicana
3. Sitta carolinensis aculeata
4. Lophophanes inornatus
5. Regulus calendula
6. Dendroica auduboni
7. Passerculus versicolor
8. Pooecetes gramineus
9. Spizella socialis arizonae
10. Zonotrichia leucophrys
11. Pipilo maculatus megalonyx
12. Cyanospiza cyanea
12. Scolecophagus cyanocephalus

13. *Corvus corax*
 14. *Thymopsis cyanocephala*
 15. *Aphelocoma woodhousei*
 16. *Cyanocitta stelleri macrolopha*
 17. *Picus villosus*. - One seen
 upon a prostrate pine log
 picking. Several seen
 18. *Sphyrapicus varius nuchalis*
 A number seen.
 19. *Melanerpes formicivorus*
 Very abundant & busily
 engaged in carrying acorns
 and storing them in holes
 in the bark of *Pinus*
 and between the bark and
 the wood. I stripped the
 bark from the lower part
 of a dead pine tree, for the
 purpose of gathering specimens
 of the acorns pounded in holes
 in the bark. As I did so
 about a peck of acorns

(Oct. 14)

sat on the ground. They
 were small acorns from the
 small-leaved oak (Quercus emoryi) I filled
 my pocket & found them
 as sweet as chestnuts and
 very good eating. As high up
 as I was able to loosen the
 bark, I found a layer of
 acorns between it and the
 trunk. These birds are noisy
 & gregarious, but withal very
 industrious & may always
 be seen carrying an acorn
 from the oak to the pine-tree.
 The black & white colors
 are displayed to advantage
 in flight & the red crest gleams
 brightly.

20. Colaptes auratus mexicanus
 Very abundant

21. Junco oreganus

22. Accipiter fuscus

23. Buteo borealis calurus

24. Zenaidura carolinensis. One

25. Contortyx massaena. - Gull,

Crook saw one flock,

26. Meleagris gallopavo. - Gull

Crook shot two from a flock,

After rising at daylight, we tried to find the trail across the Canon to camp in time to feed our horses & ourselves. I had breakfasted yesterday in camp & eaten in lunch with Dr. Fisher & was famished last night when I lay down to sleep, after riding all the afternoon and evening, and hunting part of the night for a trail across Black River Canon to camp, with only my saddle blankets for bed & covering & my saddle for a pillow. This morning I was horribly hungry, but we had much difficulty in finding the trail, and I became discouraged when I saw Genl. Crook riding off on his mule. Knowing that the Command would immediately follow

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and it would be too late to feed as the grain and rations would all be soaked on the mules. I thought the train would of necessity have to follow the main road to San Carlos, and so turned and retraced my steps, leading my horse back up the rocky Malapai hillsides to the camp where Stenard and I and myself had slept last night. I saw a magnificent Wildcat (Lynx rufus) while looking for the San Carlos road. It ran towards me & crossed within a few rods of my horse, so near that I might easily have shot it dead if I had been provided with a heavy charge of shot; but as I only had fine birdshot I did not shoot at all, but

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had watched the motions of this handsome, graceful animal, which I have seldom seen alive before.

I soon got on the road & reached Black River at the bottom of the Canon, about 2 or 3 miles below the General's camp. I intended to keep the road and ride slowly until the column overtook me, but when I reached the bottom of the Canon it occurred to me that the General might not choose to strike the road at all; so I concluded to tie my hungry horse & let him eat grass while I followed the crest of the hill & met the column. I obtained information concerning the route; but I was too late & only found at last night's camp the

Grain pack mules & packers from Hospital Cleveland Darg who had found the trail after I left him & had waited for me. The packers had no knowledge about the route to be travelled & only said they were going to follow Soul Crook's trail & the General's. The General had reached camp just as the cooks were leaving & gotten a little cold coffee & ginger snaps & shared them with me. He had eaten supper with an outfit of Mormons who passed by while he was holding the horses & I was looking for a way to camp, so was not too starved as yet. He advised me to go back & get my horse & follow the General's trail. I did

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but it was an awful
tramp & my horse was
tired and balked when
I tried to lead him down
the last Malapai hill
to the Steward's horse & trail.
At length I got him down.
At the River a magnificent
drake of Mergus serrator
could have been shot had
not the Steward taken charge
of my gun & coat when I
went back. Black River
is the handsomest stream I
have seen in Arizona &
is filled with beautiful
trout & haunted by wildfowl.

After grazing our hungry
horses & working up a few
notes, we followed the
trail. Large flocks of
Maximilian's Jays and
a good number of more

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other species of Jays &
a multitude of Flickers
& Carpenters were seen.
As we rode over the
rough Malapai hills, the
Steward's horse had lost
two shoes & he consequently
preferred walking & leading
his horse a good part of
the way. A flock of Bob-
Quails was passed by
the Steward within a few
feet; but they flew when I
reached them & scattered,
uttering a loud note as they
left the ground with a
whirring sound. I flushed
four of them again while the
Steward was trying to fasten
on a shoe to his horse's
foot with a couple of stones
in lieu of a hammer, but
only shot one, a young

(Oct. 13.)

one, Mr. Powell, struck the
San Carlos road & I had the
mortification of knowing
that had I followed my
original plan & followed
the road I would have
ridden into camp at the
head of the procession and
saved myself four hours
of desperately hard work.

The timber along the road
was juniper, pine & oak
until we got to the bottom
of Rocky Canon & found
only junipers & oaks, and
thence passed out of the
Canon upon a large
prairie through which Ash
Creek, bordered with junipers
& oaks & some deciduous
trees. We reached camp
14 just at dark. On the
prairie we found Doves

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and some tall, cacti
growing in  and
tree form bearing yellow
fruit. The same that we saw while
passing through New Mexico.

The Birds seen were:

1. *Merula migratoria propinqua*
2. *Sialia mexicana*
3. *Regulus calendula*
4. *Lophophanes inornatus*. In
junipers.
5. *Parus montanus*. In flocks
on the highest ground.
6. *Sitta carolinensis aculeata*
all along.
7. *Sitta pygmaea*. - A few
flocks amongst the pines
on the highest ground.
8. *Dendroica auduboni*
9. *Poocetes gramineus*. A few
10. *Passerculus ochrocephalus*
A few on the prairie,

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after leaving Rocky Canon

11. *Junco hyemalis oregonus*
12. *Junco hyemalis dorsalis*
13. *Spizella domesticus arizonae*
14. *Empidonax alpestris*
15. *Pipilo maculatus megalonyx*
16. *Sturnella neglecta*, One
near Black River; the
second seen on the trip.
17. *Corvus corax*, - Common -
18. *Cyanocitta stelleri macrolopha*
19. *Aphelocoma woodhousei*
20. *Cyanocitta ultramarina*
21. *Gymnophila cyanocephala*

All four of the Jays were
abundant on Black
River & were seen in the
same groves of trees
together. All were
numerous as long as
we were in the timber.
Aphelocoma woodhousei
Cyanocitta ultramarina

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are partial to the oaks.

The other two to the evergreens.

22. *Picus villosus harrisi*
23. *Sphyrapicus nuchalis*
24. *Melanerpes formicivorus*
25. *Geothlypis trichas*
26. *Ceryle alcyon*, - One or
two on Black River
27. *Bubo virginianus*, - One on
bank of Black River.
28. *Ammodramus sparguerus*
29. ~~Falco~~ *Circus* *fuscus*
30. *Buteo calurus*
31. *Zenaidura macroura*

Abundant after we
left the Rocky Canon
trees along the road.
Not seen before.

32. *Troglodytes gambeli*, - One
flock seen at the bottom
of Rocky Canon.
33. *Copilotyrus massina* -
Capt Roberts saw one

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mounted were very plentiful
in the low, coarse, spinous
cactus, new to me. One
seen upon the lower foot-
hills we did not see me-
quite on the highest, west side of
the Sierra.

Mammals:

Carnivora: Fox, Badger - seen

A large *Rottmannia* was shot
in the rocky foothills of the Sierra.

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1. *Amphispiza bilineata*. - A few
seen singing in the
lower foot-hills.
2. *Oroscoptes montanus*. - Common
in the foot-hills & the bottom.
3. *Sialia mexicana*. - One flock.
4. *Sagittarius arifrons*. - Common
in the rocky cañons on the foot-
hills of the Sierra.
5. *Eremophila alpestris*. - A few
large flocks in prairies near
Archbishop's Camp.
6. *Carpodacus frontalis*. - Abundant
at Camp 14 on Ash Creek &
thence to the Sierra.
7. *Sturnella saxatilis*. - One
seen near Ash Creek camp &
a few others seen en route.
8. *Psaltriparus plumbeus*. - One seen.
9. *Poocetes gramineus*. - One seen.
10. *Amphispiza bilineata*. - First
seen since leaving Verde. They

at night by small numbers
in the foot hills & became
abundant as we descended
to the bottom.

11. *Pipilo aberti*. — First seen
since we left the ridge. Several
were seen just the foot hills; &
the species became abundant
as we descended to the Gila bottom.

12. *Pipilo maculatus megalonyx*.
A number were seen in the
foot hills.

13. *Zonotrichia leucophrys*. — Side
of the ridge barely extended to eye
& was brown on the occiput in a
specimen I shot in adult plumage.
The young ones shot were with it.

14. *Scolecophagus urocaelatus*.
In large flocks in camp on
Ash Creek. One was found at
a water-hole which was so
gentle that it was almost
captured & afterwards followed

our horses for a mile or
more, constantly alighting
beside them on the road. We
suspected that it had been a
house bird, We saw several
other flocks on our route to
the Gila.

15. *Corvus corax*. — Numbers
abundant about Camp 14 as we
were leaving & killed about
the camp & the learning
from which occurred the
next. They often alighted
close to our horses & mules
along the road.

16. *Aphelocoma woodhousei*. —
Common all through the
 foothills wherever there was
vegetation enough to suit it.

17. *Gymnospiza cyanocephala*. —
Large flocks seen all along
the route until we reached
the lower foot-hills.

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18. *Geococcyx* is seen in the foothills.
 19. *Geococcyx* *californianus*. One seen by Genl. Crawford.
 20. *Accipiter fuscus*. - A few seen.
 21. *Sceloporus* *cooperi*. One.
 22. *Tamias* *eximius*. A number seen.
 23. *Felis* *coluberrima*. One seen in a rocky canon.
 24. *Lophortyx gambeli*. One flock seen in the foot-hills.
 [After we reached the Gila I had to attend to business and callers (Capt. Crawford & Dr. Davis). The Dr. gave me a good many interesting facts in zoology. These things prevented my exploring the banks of the Gila where we were encamped; but when I went to bathe I saw plenty of Gambels Quail & Song Sparrows

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- and heard Flickers all the afternoon. In the evening Genl. Crook called out to me as I sat talking to Dr. Davis "Say, Doctor, did you hear that note? That was the Gila Woodpecker!" I snatched up my gun and after waiting among the scattered cottonwoods a little while I shot the first specimen I ever saw.] Some Ducks were seen in the Gila.
 25. *Melospiza fasciata*
 26. *Colaptes auratus mexicanus*
 27. *Centurus urophasianus*.
 3414. *Corymbus longatus* ♂ juv.
 Length 1. cul 1.55; 935.
 780; 1425; 35-55; 85; cul 71; gape, 107; width of bill opposite base of nostril 12.5; depth same place 22.5. Bare tibia tarsus 92; outer toe 125.

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~~note~~, cl 9, mte 115; 12,
Irides rich brown, Bill
with upper one-half of maxilla
blackish + a dusky line
extending 1/2 from tip to base
of gape + tip of mandible
blackish. Vomer of bill, pale
greenish. Cul., solid, larsiv
+ feet, black; with a broad
band of flesh color on center
of webs (wedge shaped - base toward
claw). Inner surface of tarsi
+ feet, pale greenish; outer
flesh color, tipped with black.
3415. Centurus urophagioides ^{ad.}
244; 427; 132; 96; cul., 26;
gape, 30; tars., 22.5; mte, 27;
cl., 10.5; Irides, red. Bill,
plumbeous-black; tarsi + feet,
plumbeous; claws plumbeous
at base shading to black at
tip. Gila R. 13 m. fr. S. Carol.

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Between Huntig + Gila River

3416. Zonotrichia leucophrys ^{ad.}
175; 260; 79; 81; cul., 12;
gape, 13.5; tars 23; mte 23;
cl., 6.5; Irides, hazel. Bill
brownish-yellow, with maxilla
slightly tipped with dusky.
Tarsi feet + claws, brown.
~~3417. Carpodacus frontalis ^{ad.}~~
~~155; 250; 78; 69; cul., 10;~~
~~gape, 10.5; tars 18; mte, 17; cl~~
~~5.5. Not skinned~~
3418. ^(at Huntig) Passerculus savanna ^{ad.}
149; 245; 71; 58; cul., 10.5;
gape, 11.5; tars 21.5 mte 20 cl. 5.
~~(3419) Amphispiza montana ^{ad.}~~
~~230; 320; 99; 100; mte 12~~
~~gape, 25; tars 32 mte 26 cl. 7.~~
~~Irides, yellow. Not skinned.~~

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3418

~~3420~~, *Centurus urophasianus* f. c.

241; 418; 130; 91; cul., 26;

gape, 31; tars., 21.5; mte. 27.5

Bill 10; Gila 12 m. fr. S. Carlos

~~3419~~ *Centurus urophasianus* ♂ ad.

265; 454; 138; 100; cul., 32;

gape, 37; tars., 21; mte., 32;

Bill 12; Irides dark red. Bill

Larsy / at

Gila R. 12 m. fr. S. Carlos

Plumbeous - gape, black

Plumbeous, black, at tip.

3420

~~3422~~, *Centurus urophasianus* ♂ ad.

271; 455; 140; 9.9; cul. 33;

gape, 37.5; tars., 25; mte., 31;

Bill 11.5; Gila Riv. 10 m. fr. S. Carlos

3421

~~3423~~, *Centurus urophasianus* ♂ ad.

259; 445; 132; 98; cul. 32;

gape, 37; tarsus, 25.5; mte. 30;

Bill 10; Gila Riv. 10 m. fr. S. Carlos

~~3421~~ *Centurus urophasianus* ♂ ad.

221; 400; 124; 91; cul., 24;

gape, 27; tars., 21; mte., 23.5;

Bill 8.5; Gila Riv. 10 m. fr. S. Carlos

(Oct. 17.)

Gila Riv. 1037 C.

3423 length to end claws, 215;

~~3425~~, *Centurus urophasianus*

♀ Bill 188; 328; 99; 51;

cul., 24; gape, 20; tars., 24.5;

mte., 24; Bill, 4.5; bare tib., 12;

~~3424~~ *Limnunculus* ♂ ad.

267; 565; 179; 132; cul., 12;

gape, 14.5; tars., 4; mte., 12;

Bill 10; Gila Riv. 10 m. fr. S. Carlos

Cere, yellow; tars., 37; mte., 31;

Bill 10; Gila Riv. 10 m. fr. S. Carlos

orange yellow; claws, black

Bill 10; Gila Riv. 10 m. fr. S. Carlos

to black

~~3425~~ *Limnunculus* ♂ ad.

242; 7; tars., 450;

Length to end of claws, 450;

363; 660; 265; 84; cul., 55;

gape, 62; bare tibia, 41;

tarsus, 63; mte., 44; cul., 6.5

Irides, hazel. Bill, black

Legs & feet deep yellow

Claws, black. Gila Riv., 10

m. fr. S. Carlos

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Gila Riv. 7 m. from San Carlos

2422¹ Ardea herodias. ♀ ad.
Length to end of toes, 1310
1015; 1640; 1445; 172; cul,
126; gape, 159; tib., 92;
tars., 155; mte., 108; al., 16.

The following birds were seen on
the way to San Carlos from our
camp on the Gila near the crossing
at the Sub-Agency (Camp 15).

1. Merula migratoria propinqua. - Common
2. Hesperophyes crissalis. - Singing
3. Oreoscoptes montanus. - Common.
4. Salpinctes obsoletus. - In the canons
near San Carlos.
5. Eremophila alpestris. - A few
6. Dendroica auduboni. - Common.
7. Lanius californicus. - A few
8. Corpodacus frontalis. - Very aban-
dant. Singing in early morning
9. Astragalinus psaltria. - Singing. I
did not shoot any & do not know
whether they are typical psaltria
or var. mexicana.

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10. Amphispiza bilineata. - Common
and singing.
11. Zonotrichia leucophrys. - Exceedingly
abundant & singing a song
that resembles the notes of albicollis
12. Melospiza fasciata. - Common
beside the Gila all along the way.
13. Spizella socialis arizonae. - A few.
14. Pipilo aberti. - Very abundant.
15. Sceloporus cyanocephalus. -
In large flocks everywhere.
16. Xanthocephalus icterocephalus
In large flocks. (flocks)
17. Sturnella neglecta. - In small
18. Corvus corax. - Abundant
19. Tyrannus vociferans. - Abundant
Some may have been verticalis
20. Sayornis sayi. - A few.
21. Vermilion Flycatcher. - One seen
22. Ceryle alcyon. - Common
23. Peleus scalaris. - Common
24. Colaptes auratus mexicanus. - Common
25. Ceryle alcyon. - Two seen

(Oct. 17.)

on the Gila in the cottonwoods and one shot but fell in an inaccessible locality. I was surprised at their presence in this low region.

26. Centurus urophagioides. - Quite common among the cottonwood along the Gila. They are often seen pecking at the lower part of the tree-trunks as well as in the tree-tops, and I even saw one fly down and alight upon the ground and pick up some insect. They often perch upon the topmost dry branch of a cottonwood in the manner of the Flicker. Their cry is a succession of harsh sounds.

27. Trinunculus sparverius. - Very abundant & gentle.

28. Accipiter fuscus. - Abundant.

29. Circus hudsonius. - One seen.

30. Lophortyx gambeli. - Common.

31. Ardea herodias. - Several.

32. Tringoides macularius. - Common.

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33. Totanus melanoleucus. Three seen.
34. Zonotrichia carolinensis. Four seen.
I shot the following named

animals on the way to San Carlos:-

1 Jack Rabbit.

25 Gambel's Quails.

1 Great Blue Heron.

4. Gila Woodpeckers.

1 Greater Yellow-legs.

1 Spotted Sandpiper.

1 Nuchal Woodpecker.

1 Sparrow Hawk.

Total. 35.

The following Mammals were seen:

Tamias (On. Spermophilus). - Among the mesquites on the San Carlos flat at the Agency. (Tamias harrisi and Spermophilus tereticaudus).

Lepus Callotis texanus. Two seen.

Coyote. - Abundant & yelling all night about camp. In the forenoon I saw one in the trail just in front of my horse; but was unprepared to shoot it before it got out of range.

Oct. 17.

Castor fiber. - This animal is abundant in the Gila & I saw many cottonwoods cut down and gnawed by them.

The Gila is little if any larger than the San River. It can be forded almost any where. The cottonwoods are not as plentiful nor as large & healthy trees as on the Verde. There is a good deal of brushwood along the banks, making good cover for small birds. In fact I saw masses of little birds, chiefly sparrows, but did not take the time to hunt them up closely, as most of them were common sparrows etc., and the cover so close that they had to be shot in order to identify them. certainly.

7 to Clear Creek Camp 1.

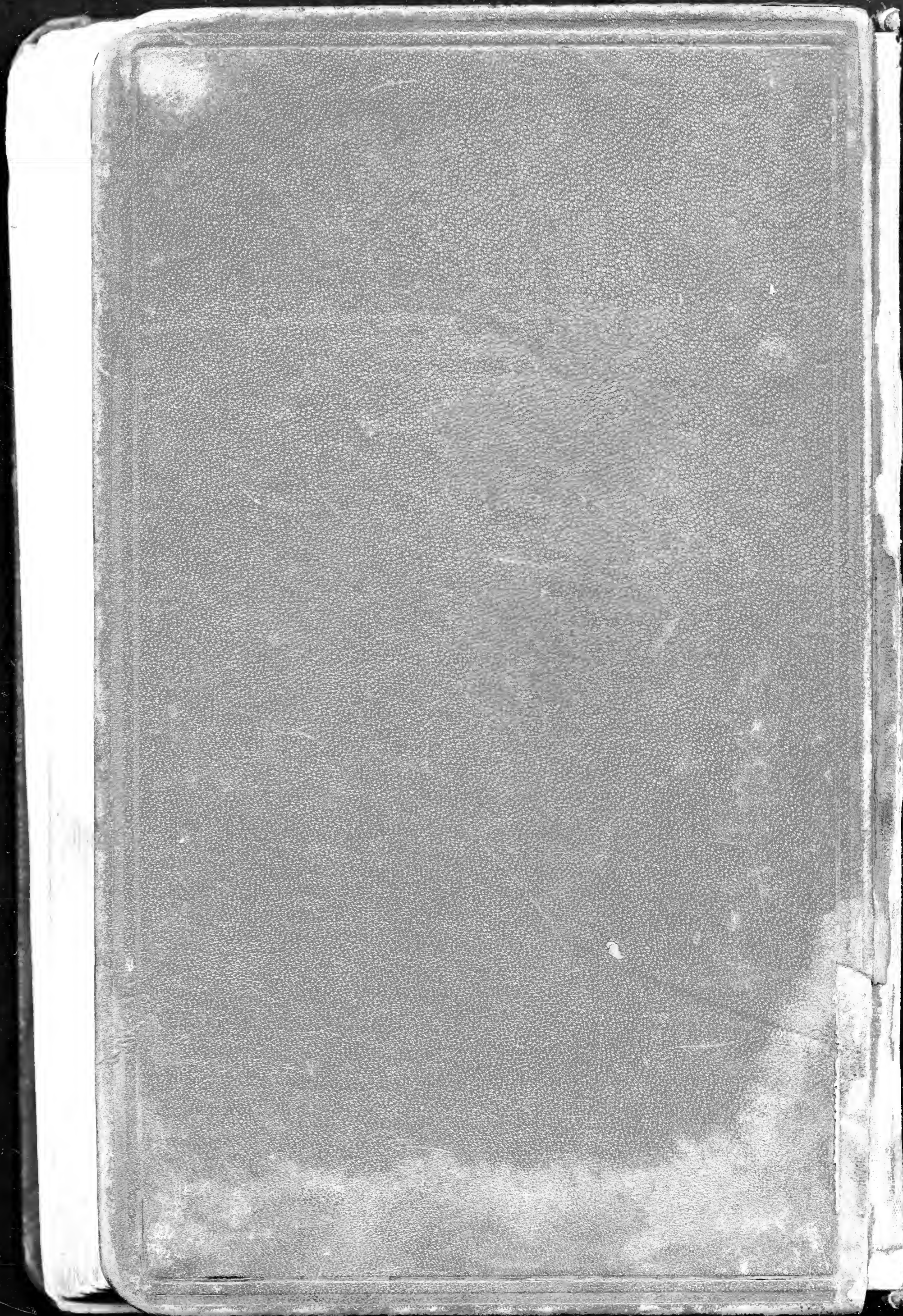
16 to Camp 2

16 to Camp 3.

19 to Camp 4

22 to Camp 5.

^{Feb. 23.}
Harporhynchus crissalis ♂ 4; ♀ 6
Pipilo aberti ♂ 6; ♀ 6
Lanius excubitorides ♂ 6; ♀ 7
Pipilo mac. megalonyx ♂ 6; ♀ 10
Lophortyx gambeli ♂ 0; ♀ 3
Junco sparrow ♂ 0; ♀ 5
Calamospiza melanocorys ♂ 1; ♀ 9
Oxyechus vociferus ♂ 5; ♀ 6



49, 50, then skip to p.
#8. begin with p. 94, go to end (p. 242); then to p. 50 and go to p. 93;
then to p. 40 and go to p. 47.

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